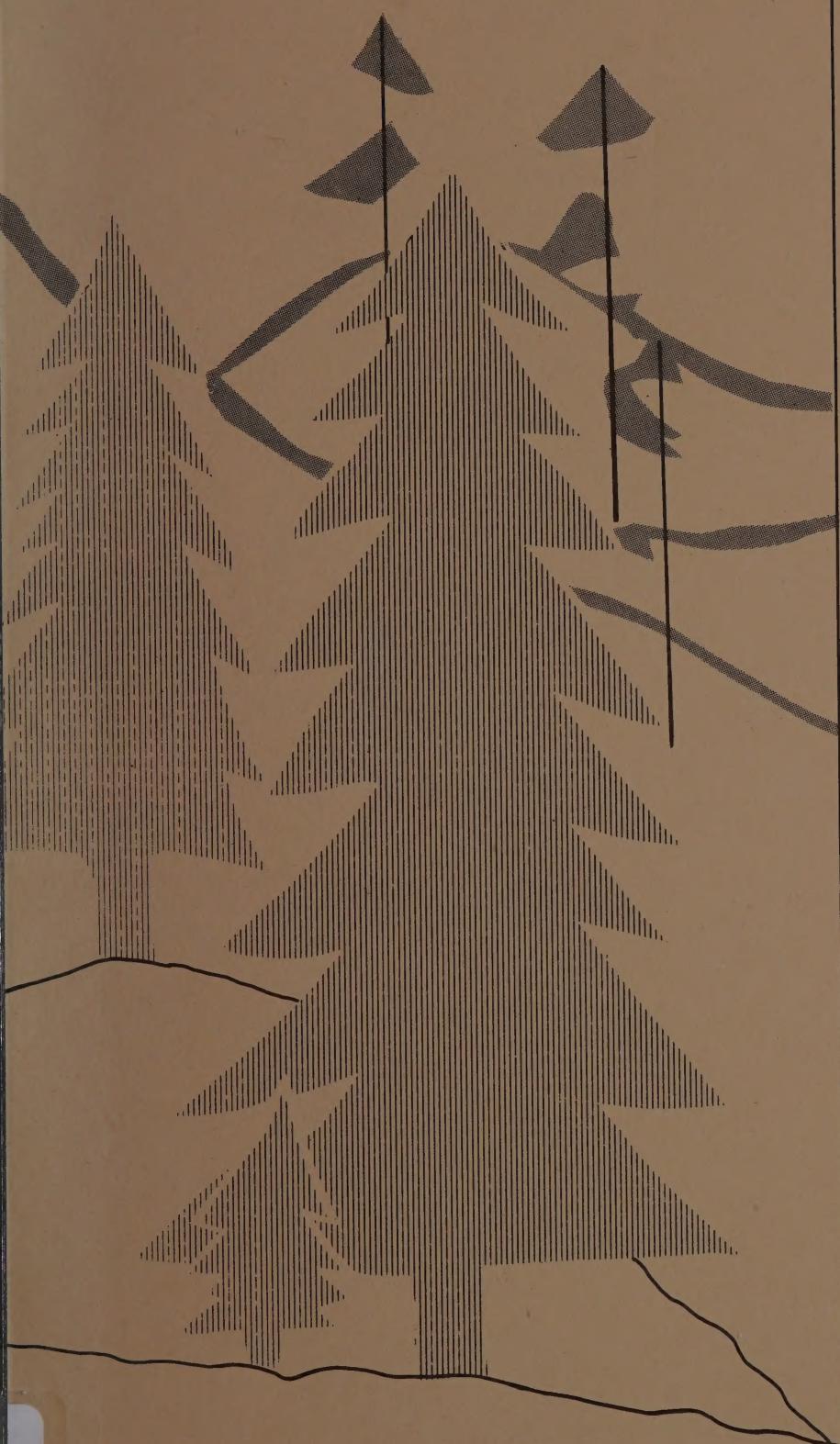
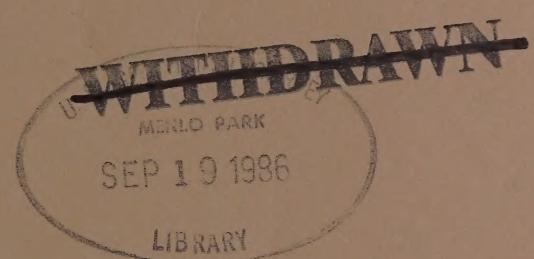




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NORTH IDAHO
PROPOSED
MFP AMENDMENT
&
FINAL
ENVIRONMENTAL
IMPACT STATEMENT
WILDERNESS



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

COEUR D'ALENE DISTRICT

1986



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United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Coeur D' Alene District
1808 N. Third Street
Coeur D' Alene, Idaho 83814

IN REPLY
REFER TO:

Enclosed is the Final Amendment and Environmental Impact Statement (EIS) for lands in the Bureau of Land Management's (BLM) Coeur d' Alene District. This document analyzes alternative land use allocations, including wilderness suitability, for five Wilderness Study Areas (WSAs) located in the panhandle of northern Idaho.

This Amendment/EIS is part of the decision process but is not a decision document. It satisfies a requirement of the Federal Land Policy and Management Act (FLPMA) which directs the Secretary of the Interior to review those public lands which have wilderness characteristics and report to the President recommendations as to the suitability or nonsuitability of the lands for preservation as wilderness. This document contains information upon which the Secretary of the Interior will base his wilderness recommendations.

We appreciate the time and effort spent by those who commented on the draft Amendment/EIS and/or attended our public meetings and hearing. Many of the comments resulted in a better assessment of the various alternatives.

Thank you for your interest and participation.

Sincerely yours,

A handwritten signature in cursive ink, appearing to read "Wayne Zinne".
Wayne Zinne
District Manager

Enclosure

585-5(283) 5-3(273)

N811

Dec 31 1986



DEPARTMENT OF THE INTERIOR

**NORTH IDAHO MFP AMENDMENT AND
ENVIRONMENTAL IMPACT STATEMENT**

FINAL

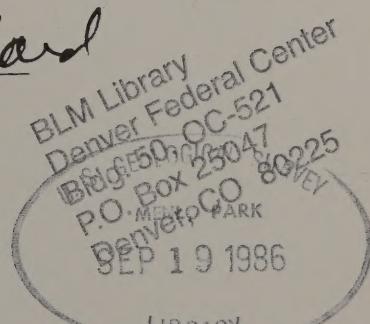
Prepared by

BUREAU OF LAND MANAGEMENT

COEUR D'ALENE DISTRICT OFFICE

Larry S. Woodard

Associate State Director



NORTH IDAHO MFP AMENDMENT
AND
ENVIRONMENTAL IMPACT STATEMENT

() Draft

(X) Final Environmental Impact Statement

1. Type of action: () Administrative

(X) Legislative

2. Responsible Agencies:

a. Lead Agency: Department of the Interior, Bureau of Land Management

b. Cooperating Agencies: None

3. Abstract: This document analyzes multiple use land allocations, including wilderness suitability, for five Wilderness Study Areas (WSAs) in northern Idaho. These WSAs contain a total of 38,468 acres and range in size from 720 acres to 17,129 acres.

For each WSA, a number of alternatives have been developed. These alternatives consider allocations, use, and management options ranging from resource protection, including wilderness designation, to commodity resource production.

4. Comments have been requested and received from the following:

See Chapter 5 for a list of agencies, organizations, and individuals who commented on the draft Amendment/EIS.

5. Date draft statement made available to EPA and the public:

June 18, 1982.

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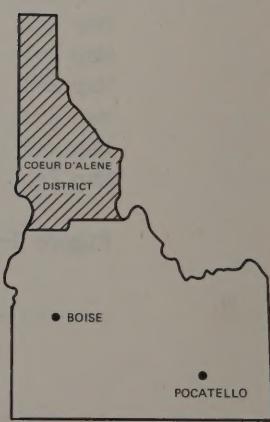
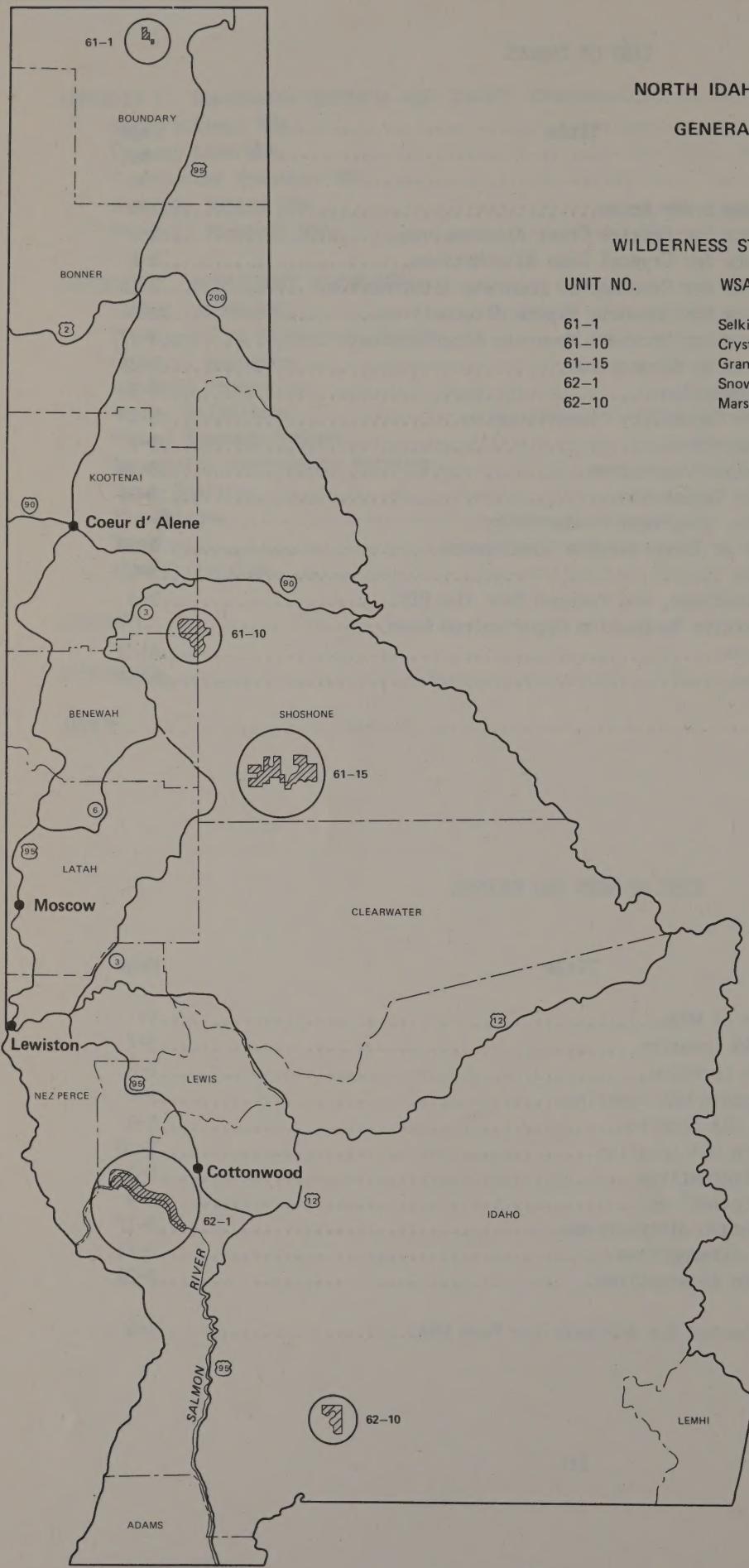
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SUMMARY

INTRODUCTION

This document was prepared to fulfill two purposes. First, previously completed land use plans for the Coeur d'Alene District (Management Framework Plans) did not include certain areas found to be roadless during initial wilderness inventories. Since no land use allocations were made on these areas, an amendment to the land use plans is necessary. Secondly, the BLM is required to review public lands that contain wilderness characteristics and make recommendations as to their suitability for preservation as wilderness. This study assesses the environmental impacts of alternative land use allocations including wilderness.

It is important to note that this EIS is different from those currently being prepared by other BLM offices since it assesses a full range of multiple use allocations, not just wilderness. As such, more alternatives are necessary to cover the full spectrum of land use allocations.

AREAS STUDIED

The following Wilderness Study Areas (WSAs) are discussed in this EIS:

Name	Number	Acreage	County
Selkirk Crest	61-1	720	Boundary
Crystal Lake	61-10	9,027	Kootenai, Benewah
Grandmother Mountain	61-15a,b	17,129	Shoshone
Snowhole Rapids	62-1	5,068	Idaho, Lewis
Marshall Mountain	62-10	6,524	Idaho

ENVIRONMENTAL ISSUE IDENTIFICATION/SCOPING

The scoping process for the North Idaho MFP Amendment/EIS encompassed issues identified by the BLM staff, by the public during formal scoping comment periods (in March and July, 1981), at public meetings (in July, 1982), and from comments received concerning the draft document made by the public and by federal, state, and local agencies.

The following environmental issues were selected for analysis in this EIS:

1. Impacts on Wilderness Values
2. Impacts on Development of Mineral Resources
3. Impacts on Timber Industry and Local Economy
4. Impacts on Off-Road Vehicle Use
5. Impacts on Soil
6. Impacts on Water Quality
7. Impacts on Water Supply
8. Impacts on Fish
9. Impacts on Vegetation

10. Impacts on Mammals and Birds
11. Impacts on Archaeological Resources
12. Impacts on Scenic Quality

During the scoping process numerous consultations occurred with the U.S. Fish and Wildlife Service concerning threatened or endangered species, the U.S. Forest Service concerning land use plans on adjoining lands, and the Idaho State Historic Preservation Officer concerning cultural sites.

ALTERNATIVE DEVELOPMENT

Using issues, criteria, and policy as a basis, a number of alternatives were developed for each Wilderness Study Area (WSA). The following general range of alternatives was considered: All Wilderness, No Action/No Wilderness, and Partial Wilderness (where appropriate).

In addition, since no land use allocations have been made through previous planning actions, additional alternatives for certain WSAs were developed and selected for analysis. All the alternatives are described in Chapter 2.

PROPOSED ACTION/PREFERRED ALTERNATIVE

The following is a list of proposed actions for each WSA. These are also the agency's preferred alternatives.

<u>WSA</u>	<u>Proposed Action/Preferred Alternative</u>
Selkirk Crest	No Action/No Wilderness
Crystal Lake	Outstanding Natural Area designation on entire WSA
Grandmother Mountain	Outstanding Natural Area and Research Natural Area designations on portions with intensive timber management on remainder.
Snowhole Rapids	No Action/No Wilderness
Marshall Mountain	No Action/No Wilderness

ENVIRONMENTAL CONSEQUENCES

The analysis documented in Chapter 4 of this EIS revealed that no individual or cumulative significant impacts would result from implementation of any alternative. Although timber values would be foregone under those alternatives with special designations (Wilderness, ONA, RNA) and wilderness values would be degraded as a result of those alternatives favoring commodity production, none of these impacts were deemed significant within the context of the region. Due to the small amount of land under BLM administration in the EIS area (1.8% of total land area), no community or social value dependency on BLM lands or programs was found to exist.

CHAPTER 1
INTRODUCTION AND PLANNING PROCESS

PURPOSE AND NEED

This amendment has been prepared for two main reasons. First, the Management Framework Plans (MFPs) prepared for the Coeur d'Alene District in 1981 (Emerald Empire MFP and Chief Joseph MFP) did not include the lands designated as Wilderness Study Areas (WSAs). It is necessary, therefore, to amend the MFPs to include the WSA units in the district land use plans. Secondly, the Federal Land Policy and Management Act of 1976 (FLPMA) requires that public lands with wilderness characteristics be reviewed and recommendations made concerning their preservation as wilderness. This amendment and environmental impact statement (EIS) will satisfy this requirement. The WSAs are listed in Table 1-1 below.

LIST OF WILDERNESS STUDY AREAS
TABLE 1-1

Name	Number	Acreage	County	Management Framework Plan Being Amended
Selkirk Crest	61-1	720	Boundary	Emerald Empire
Crystal Lake	61-10	9,027	Kootenai, Benewah	Emerald Empire
Grandmother Mountain	61-15a,b	17,129	Shoshone	Emerald Empire
Snowhole Rapids	62-1	5,068	Idaho, Lewis	Chief Joseph
Marshall Mountain	62-10	6,524	Idaho	Chief Joseph

LOCATION

The General Location Map, located at the front of this EIS, shows the geographic distribution of the WSAs and the acreages each contains. The five WSAs are located in the panhandle of northern Idaho, an area extending from the Canadian border on the north to the Payette National Forest on the south. Maps 1-1 through 1-5 show the specific locations of each WSA.

REQUIREMENTS FOR WILDERNESS STUDY

In accordance with FLPMA, the Secretary of the Interior is required to review areas of the public lands that have been determined to have wilderness characteristics (WSAs) and to report to the President the recommendations as to the suitability or nonsuitability of each WSA for preservation as wilderness. The President must report the recommendations to Congress. A mineral survey to determine mineral values, if any, will be conducted by the U.S. Geological Survey and Bureau of Mines for any area recommended as suitable. Congress makes the final decisions concerning wilderness since only they can designate an area as wilderness.

During the period of this review and until Congress acts on the President's recommendations, the Secretary is required to manage the WSAs so as not to impair their suitability for preservation as wilderness, subject to certain exceptions and conditions. Each WSA has been studied through the BLM multiple-use planning process to analyze all values, resources, and uses within the area. The findings of the wilderness study, including public participation, determined whether these areas were recommended as suitable or nonsuitable for designation as wilderness. Determining an area's suitability or nonsuitability for preservation as wilderness means determining whether the area is more suitable for wilderness designation or more suitable for other uses.

ENVIRONMENTAL ISSUE IDENTIFICATION/SCOPING

The scoping process for the North Idaho MFP Amendment/EIS encompassed issues identified by the BLM staff, by the public during formal scoping comment periods (in March and July, 1981), at public meetings (in July, 1982), and from comments received concerning the draft document made by the public and by federal, state, and local agencies.

During the scoping period there was consultation with the Idaho State Historic Preservation Officer (SHPO) concerning the presence or absence of cultural sites in the WSAs that would be eligible for nomination for listing on the National Register of Historic Places. Particular attention was given to the cultural resource sites located within the Lower Salmon River canyon of which the Snowhole Rapids WSA is part.

Consultation with the U.S. Fish and Wildlife Service occurred during the scoping period. This consultation confirmed that no officially listed threatened or endangered plant species inhabited any WSA. It was determined, however, that a few bald eagles (an endangered species) may winter in the Snowhole Rapids WSA, but because of a natural scarcity of suitable food, this occasional use appears to be an unpredictable chance event.

The U.S. Forest Service was frequently contacted during the scoping phase to ensure that alternatives developed for those WSAs which adjoin National Forest lands were compatible with proposed forest plans. Specifically, consultation occurred with the Idaho Panhandle National Forests concerning the Selkirk Crest, Crystal Lake, and Grandmother Mountain WSAs and the Payette National Forest concerning the Marshall Mountain WSA.

The environmental issues selected for analysis in this EIS follow. It should be noted that not all of these issues pertain to every WSA. The exceptions are identified in Chapter 4, Environmental Consequences.

1. Impacts on Wilderness Values - The wilderness values of naturalness, solitude, primitive recreation and various special values could benefit from wilderness designation. The same values may be adversely affected by uses and actions that would occur should the WSAs not be designated wilderness. The significance of these beneficial or adverse impacts is an issue for analysis in the EIS.
2. Impacts on Development of Mineral Resources - Wilderness designation could affect the development of undiscovered mineral resources by withdrawing designated lands from mineral entry. Development of existing mining claims within designated wilderness areas could be affected by wilderness management restrictions. The effect of wilderness designation on the development of undiscovered and discovered mineral resources is an issue for analysis in the EIS.
3. Impacts on Timber Industry and Local Economy - Wilderness designation, or other non-commodity emphasis allocations, would prohibit intensive management of forest lands. This could affect the availability of timber for local mills and directly affect those segments of the local economy dependent on the wages and receipts from timber harvesting and marketing.
4. Impacts on Recreational Off-Road Vehicle Use - Wilderness and other protective designations would eliminate or limit the use of recreational ORVs in the WSAs. This could affect the availability of opportunities for this form of recreation.
5. Impacts on Soil - Commodity emphasis alternatives would prescribe activities such as road building, timber harvest, and vegetative manipulation actions. These activities could, either directly or indirectly, result in soil loss through erosion.

6. Impacts on Water Quality - Alternatives which prescribe activities that make soil more susceptible to erosion, either through direct disturbance or through removal of protective vegetative cover, could adversely affect water quality through increased water yield and/or increased sedimentation.
7. Impacts on Water Supply - Increased sedimentation and turbidity resulting from activities prescribed in some non-wilderness alternatives could adversely affect domestic water supplies.
8. Impacts on Fish - Decreased water quality resulting from certain activities prescribed under some non-wilderness alternatives could cause adverse impacts to fish and their habitat.
9. Impacts on Vegetation - Intensive timber management and increased access would alter the vegetative community through changes in biological productivity and removal and/or damage of vegetation.
10. Impacts on Mammals and Birds - Alterations to the vegetative community and increased human presence would affect populations and habitats of some mammals and birds.
11. Impacts on Archaeological Resources - The potential for damage and/or destruction of archaeological sites would increase as more people use the areas. National Register quality sites have been found within the Snowhole Rapids WSA.
12. Impacts on Scenic Quality - Activities prescribed by certain non-wilderness alternatives (timber harvest, road construction, and vegetative manipulation) would alter the landscape. The change may adversely affect viewers' perception of the visual quality of those viewsheds where the above-mentioned activities occur.

The following issues were identified in scoping but were not selected for detailed analysis in this EIS.

1. Impacts on Air Quality - Concerns were raised that activities associated with commercial timber harvest (road construction and use, slash burning, and vehicle emissions) could adversely affect air quality. Consultation with the Idaho Department of Health and Welfare indicated that the relatively small amount of land which could be allocated for commercial timber harvest would result in an almost immeasurable increase (less than one-half of one percent) of total particulate emissions within the study area. It was therefore determined that further analysis of this issue was unnecessary.
2. Impacts on Livestock Grazing - Livestock operators were concerned that wilderness designation would require them to modify their operations. This issue was considered but dropped because the BLM's Wilderness Management Policy provides for the continued use of wilderness areas for livestock operations at historic levels.
3. Impacts on Social Values - Some concern was expressed that wilderness designation could reduce the potential for economic returns derived from commercial timber harvest activities and subsequently affect the social systems of the area. It was determined that the relatively small amount of timber available on the WSAs (.2% of regional total) would not measurably affect local or regional social systems under any alternative. For this reason, the issue was dropped from further consideration.

THE PLANNING PROCESS, SELECTION OF THE PROPOSED ACTION AND DEVELOPMENT OF ALTERNATIVES

The Planning Process and Selection of the Proposed Action

This amendment supplements the Management Framework Plans for the Coeur d'Alene District. It has been prepared using the Bureau's Resource Management Planning process.

Development of the proposed action is guided by requirements of the Bureau's Planning Regulations, 43 CFR, part 1600. The BLM's Wilderness Study Policy (published February 3, 1982, in the Federal Register) supplements the planning regulations by providing the specific factors to be considered during the planning sequence in developing suitability recommendations. These wilderness-related criteria and quality standards are described in Appendix 1.

Based on information received during the scoping process and preliminary impact analyses, the managers selected a preferred alternative for each WSA. These preferred alternatives are the equivalent of the agency's proposed action for each WSA.

Alternatives to the Proposed Actions Selected for Analysis

The BLM Wilderness Study Policy requires the formulation and evaluation of alternatives ranging from resource protection to resource production. Therefore, the alternatives assessed in this EIS include: (1) a no wilderness alternative for each WSA; (2) an all wilderness alternative for each WSA; and (3) partial wilderness alternatives for the Grandmother Mountain and Marshall Mountain WSAs.

In this document, the no action alternative, which is required by the National Environmental Policy Act (NEPA), and no wilderness alternatives are equivalent. Both advocate a continuation of present levels of resource use and management.

Since no land-use allocations have been made through previous planning actions, additional alternatives for certain WSAs were developed and selected for analysis. Figure 1-1 presents the alternatives selected for analysis for each WSA.

Alternatives Considered but Dropped from Further Analysis

The draft EIS analyzed all the alternatives being considered for each WSA. From information received through the later stages of the scoping process, including comments received on the draft EIS, it was evident that particular alternatives should be eliminated from further analysis. These WSA/alternatives are:

Selkirk Crest WSA - none dropped.

Crystal Lake WSA - The timber emphasis alternative, number 3A and the timber/wildlife emphasis alternative, number 3B, in the draft EIS, have been dropped since they are essentially the same as the No Action/No Wilderness alternative analyzed in this final EIS.

Grandmother Mountain WSA - Three alternatives which were analyzed in the draft EIS have been dropped. These are: Alternative 3B which considered intensive timber management on a portion of the WSA and research natural area (RNA) designation on the remainder; 3D which considered RNA designation for part of the WSA and outstanding natural area (ONA) designation for the remainder; and 3E which emphasized big game habitat enhancement.

After publication of the draft EIS, it was determined that the basic features of the above-mentioned alternatives were encompassed in the other alternatives being analyzed for this WSA

Dropping these three alternatives reduces a large amount of redundant analysis.

Snowhole Rapids WSA - Two alternatives which were analyzed in the draft EIS have been eliminated from further analysis. Alternative 3A which was designed to favor recreational opportunities and 3B which emphasized anadromous fisheries habitat protection were deemed to be essentially the same as the No Action/No Wilderness alternative being analyzed in this final EIS document. The minor differences in these alternatives (3A and 3B of the draft as compared to the No Action/No Wilderness of the final) were reconciled during the preparation of the final EIS.

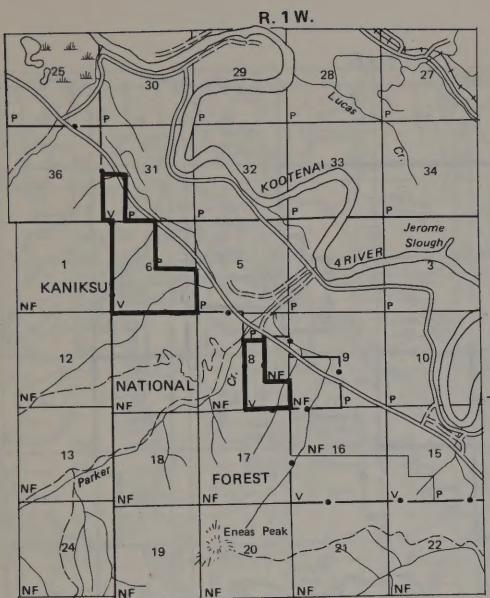
Marshall Mountain WSA - For this WSA one alternative which was analyzed in the draft EIS has been eliminated from further analysis and two others have been combined. Draft EIS Alternative 3C which prescribed closure of the entire WSA to vehicles in order to protect wildlife habitat was determined to be virtually identical to the All Wilderness alternative.

Two alternatives from the draft EIS, Alternative 2 (No Action) and Alternative 3B which recognized and emphasized the mineral potential of the WSA, had only minor differences in prescribed land-use allocations. These minor variations have been reconciled by combining these two alternatives.

FIGURE 1-1
ALTERNATIVES SELECTED FOR ANALYSIS FOR EACH WSA

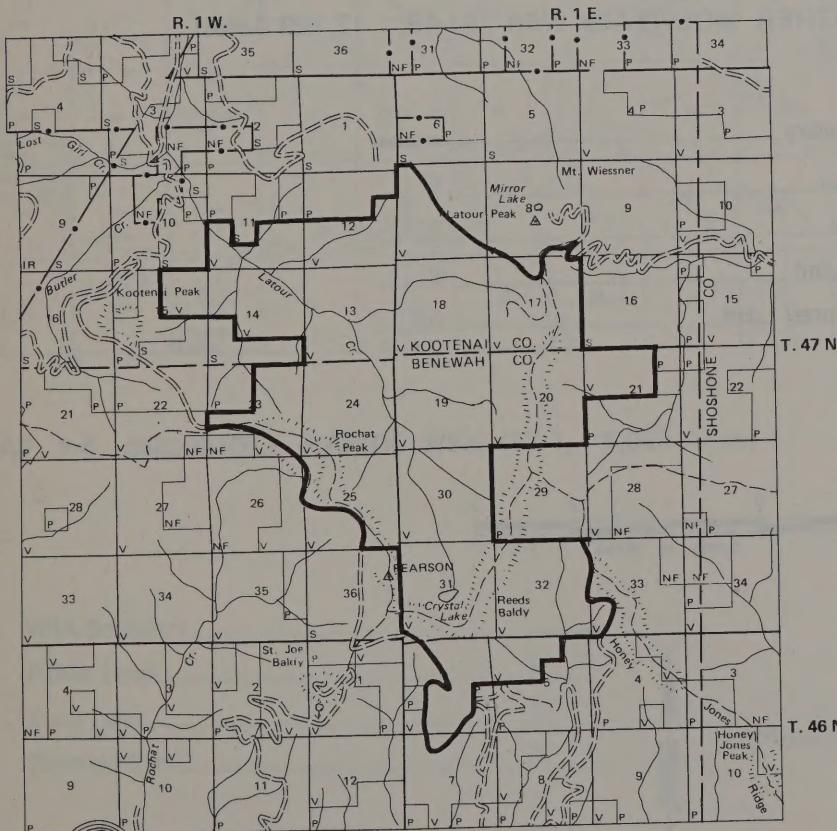
WSA	ALTERNATIVES					
Selkirk Crest 61-1	SC-1 All Wilderness	SC-2* No Action/ No Wilderness				
Crystal Lake 61-10	CL-1 All Wilderness	CL-2 No Action/ No Wilderness	CL-3* Outstanding Natural Area			
Grandmother Mountain 61-15	GM-1 All Wilderness	GM-2 No Action/ No Wilderness	GM-3 Timber Emphasis	GM-4* Timber/Outstanding Natural Area/Research Natural Area		GM-5 Partial Wilderness
Snowhole Rapids 62-1	SR-1 All Wilderness	SR-2* No Action/ No Wilderness				
Marshall Mountain 62-10	MM-1 All Wilderness	MM-2* No Action/ No Wilderness	MM-3 Timber Emphasis	MM-4 Partial Wilderness		

* = Proposed Action for each WSA.

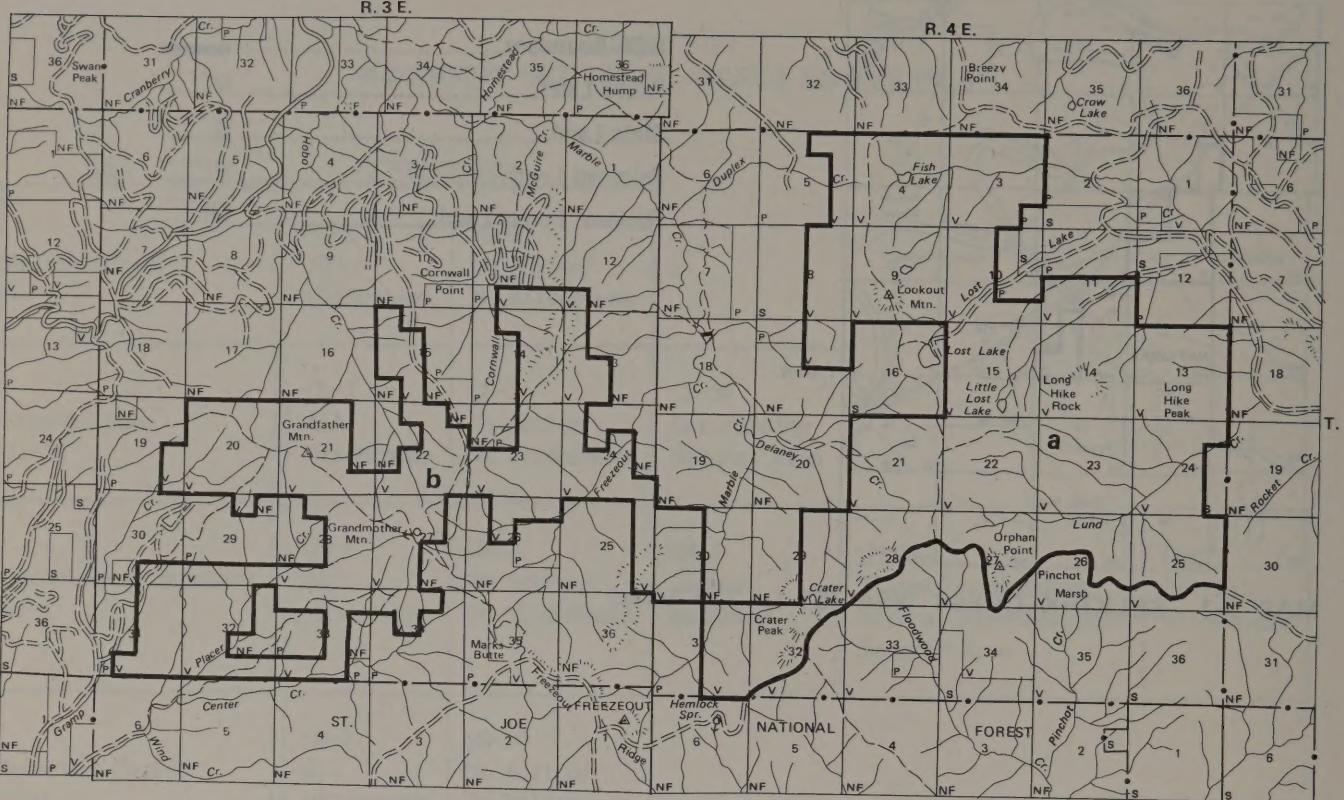


MAP 1-1 SELKIRK CREST WSA (61-1, 720 Acres)

WSA Boundary.....	
Public Land.....	
State Land.....	
Patented Land.....	
National Forest Land.....	



MAP 1-2 CRYSTAL LAKE WSA (61-10, 9,027 Acres)



MAP 1-3 GRANDMOTHER MOUNTAIN WSA (61-15, 17,129 Acres)

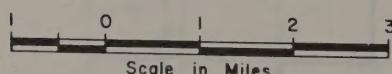
WSA Boundary.....
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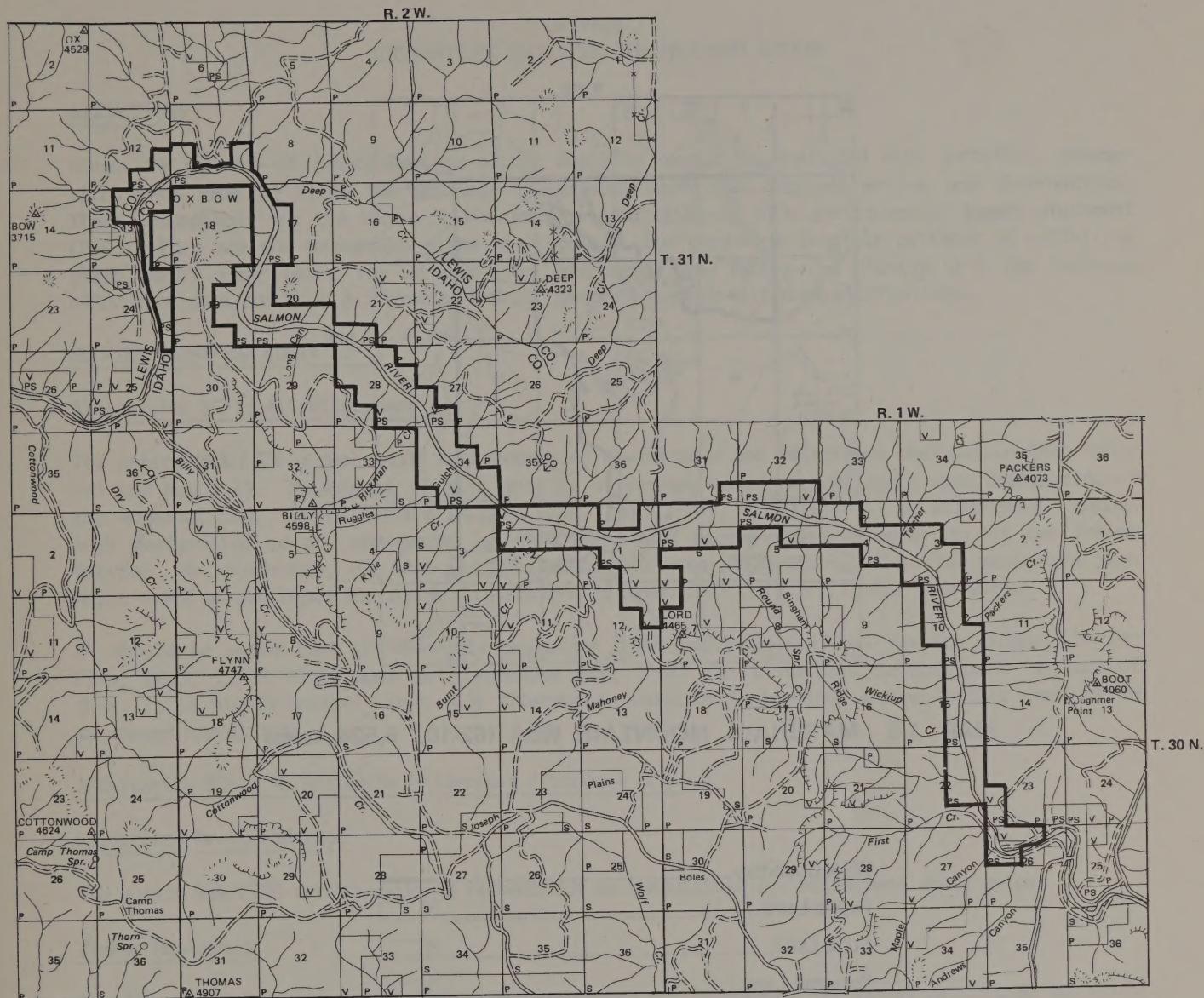
Public Land.....
[Box containing 'V']

State Land.....
[Box containing 'S']

Patented Land.....
[Box containing 'P']

National Forest Land.....
[Box containing 'NF']





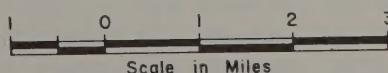
MAP 1-4 SNOWHOLE RAPIDS WSA (62-1, 5,068 Acres)

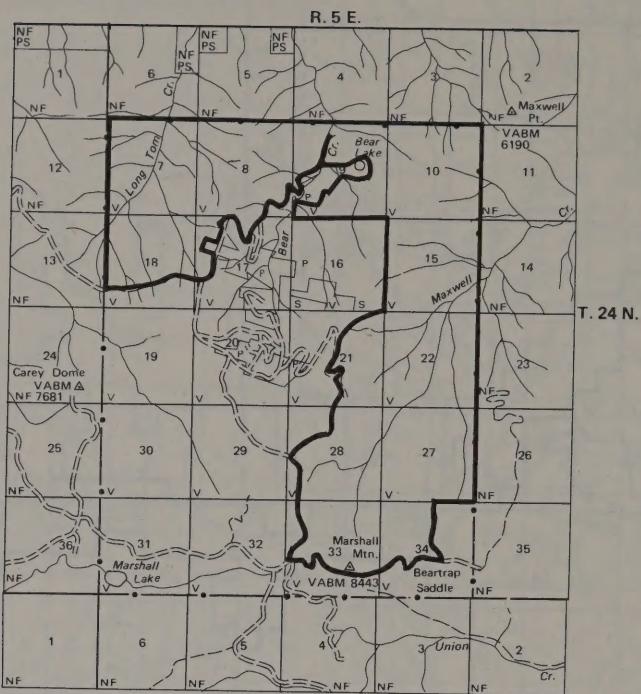
WSA Boundary.....

Public Land.....
V

State Land.....
S

Patented Land.....
P





MAP 1-5 MARSHALL MOUNTAIN WSA (62-10, 6,524 Acres)

- WSA Boundary.....
- Public Land..... V
- State Land..... S
- Patented Land..... P
- National Forest Land..... NF

0 1 2 3
Scale in Miles



CHAPTER 2
ALTERNATIVES INCLUDING THE PROPOSED ACTION

ASSUMPTIONS

Since the pattern of future actions within the WSAs cannot be predicted with certainty, assumptions were made to allow the analysis of impacts under the Proposed Action and alternatives. These assumptions are the basis of the impacts identified in this environmental impact statement (EIS). They are not management plans or proposals, but represent feasible patterns of activities which could occur under the alternatives analyzed. See Tables 2-1 through 2-5 for land-use allocation data and Maps 2-1 through 2-5 for geographic delineation of alternatives.

SELKIRK OREST WSA (Unit 61-1)

Alternative SC-1, All Wilderness

The entire WSA (720 acres) would be recommended as suitable for wilderness designation (see Table 2-1 and Map 2-1). Management of this area as wilderness would be contingent upon designation of the adjacent U.S. Forest Service RARE II area (Unit 1-125, 43,500 acres) as wilderness. Should such designation occur, management of this WSA would become the responsibility of the Forest Service. As wilderness, the area would be managed in accordance with a wilderness management plan which would be developed for the entire designated area (USFS Unit 1-125 plus this WSA).

It should be noted that the recently published Idaho Panhandle National Forests Proposed Forest Plan, Draft (USFS 1985) does not recommend Unit 1-125 for wilderness designation. Because of this, it is highly unlikely that this alternative would be implemented and no further description is deemed appropriate.

Alternative SC-2, No Action/No Wilderness (Proposed Action)

Wilderness Recommendation

The entire WSA (720 acres) would be recommended as nonsuitable for wilderness designation.

Timber Management

The 166 acres slated for custodial management would not be managed for timber production and would not be included in allowable cut computations. Timber would be removed when necessary to protect or enhance adjacent forest lands or other resource values. Any timber removal would be done in such a way as to afford maximum protection to the site or to accomplish other resource objectives.

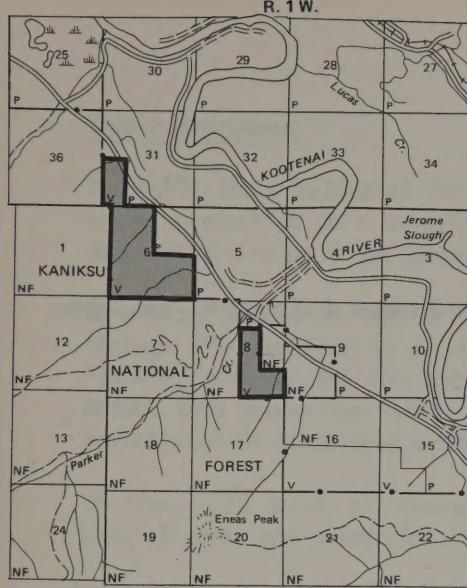
Due to the location of the timber stands in this WSA and their relative isolation from other forest lands, the probability of any timber removal activities is remote.

Recreation

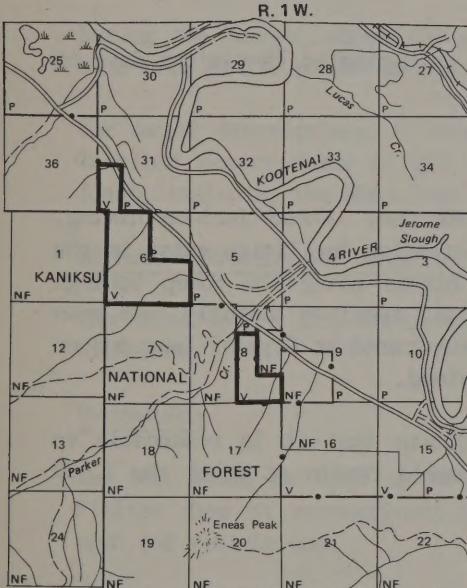
The lands within the WSA would be designated open for off-road vehicle (ORV) use. Recreational ORV use would continue to be very low (less than 10 visitor days annually) due to limited access and lack of demand. In addition to ORV use, the WSA would also be open for other recreational activities including hiking, hunting, camping, and sightseeing; however, projected use levels would remain very low.

TABLE 2-1
ALLOCATIONS/OUTPUTS FOR SELKIRK
CREST WSA ALTERNATIVES

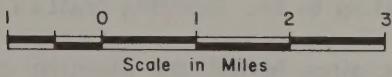
Resource Activity (units)	Alt 1 All Wilderness	Alt 2 No Action/No Wilderness (Proposed Action)
Wilderness		
Suitable (acres)	720	0
Nonsuitable (acres)	0	720
Timber Management		
Intensive-extensive (acres)	0	0
Custodial (acres)	0	166
Annual harvest (mbf)	0	0
Livestock Grazing (acres leased)	0	0
AUMs	0	0
Recreation Opportunity Setting		
Primitive (acres)	0	0
Semi-Primitive Nonmotorized (acres)	0	0
Semi-Primitive Motorized (acres)	0	0
Roaded Natural (acres)	720	450
Semi-urban and Urban (acres)	0	270
Visual Resource Management		
Class I (acres)	720	0
Class II (acres)	0	0
Class III (acres)	0	720
Class IV (acres)	0	0
Vehicle Management		
Open to all vehicles (acres)	0	720
Restricted use (acres)	0	0
Closed to all vehicles (acres)	720	0



Alternative 1: ALL WILDERNESS



WSA Boundary.....
Wilderness.....



**Alternative 2: NO ACTION/ NO WILDERNESS
(PROPOSED ACTION)**



MAP 2-1 SELKIRK CREST ALTERNATIVES

CRYSTAL LAKE WSA (Unit 61-10)

Alternative CL-1, All Wilderness

Wilderness Recommendation

The entire WSA (9,027 acres) would be recommended suitable for wilderness designation (see Table 2-2 and Map 2-2).

Timber Management

No timber management or associated activities would occur.

Livestock Grazing and Range Actions

Livestock use would be maintained at 36 Animal Unit Months (AUM) on 1,320 acres. No increases in livestock use are planned. Projection beyond existing planning estimates (beyond the 10 to 15 year planning cycle) indicate that it is reasonable to expect that this level of use would be maintained in the future. No livestock or range management facilities that would require maintenance are located within the WSA. No range improvements are planned for the area. Projection beyond existing planning estimates indicate that maintenance activities would not change and no additional construction of livestock and range management facilities would occur within the WSA.

Recreation

The WSA would be closed to ORV use. This action would eliminate an estimated 75 visitor days of recreational ORV use annually.

Existing trails (3 miles) would be closed to vehicle use.

The WSA would be open for recreational activities other than ORV use. These include hiking, camping, sightseeing, hunting, fishing, and berry picking. No recreation facilities exist in the WSA, however, Crystal Lake itself is a destination point for hikers using the Sheep Springs Campground and trailhead located outside the WSA. The WSA currently receives slightly less than 3,600 visitor days of use annually. About 80% of this use is concentrated at Crystal Lake and on the trail leading to it. Existing trails (3 miles) would be maintained.

Projected estimates beyond the planning cycle (10-15 years) indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain at about the 3,600 visitor day level.

Mineral Resource Actions

Upon designation, the lands within the WSA would, subject to valid rights then existing, be withdrawn from all forms of appropriation under the mining laws. Although no mining claims have been located in the WSA, any mineral claims that exist at the time of designation and have approved plans of operation would be examined for validity verification.

Alternative CL-2, No Action/No Wilderness

Wilderness Recommendation

The entire WSA (9,027 acres) would be recommended as nonsuitable for wilderness designation.

Timber Management

The 4,931 acres allocated for intensive-extensive timber management would be managed to maximize timber production on a sustained-yield basis. Timber harvest would be the primary goal of management activities on these lands.

An average annual harvest of 830 MBF (thousand board feet) would be assured on a continuous basis through the application of timber management guidelines derived from the Management Framework Planning process and the North Idaho Timber Management EIS (NITMEIS) (BLM 1981). In order to effect this production level, 9.8 miles of new road and temporary spur road construction would be anticipated to occur over a ten-year period.

Of the 4,931 acres of commercial forest land, 976 acres would be harvested through clearcuts, partial cuts, and commercial thinnings over a ten-year period.

Ground based and cable yarding methods would also be employed on these harvest acres.

Slash disposal, primarily accomplished through burning, would occur on approximately 440 acres.

Site preparation activities such as burning and mechanical scarification would take place on about 100 acres over a ten-year period.

Approximately 140 acres would be planted with tree seedlings for timber stand regeneration.

During the decade, about 150 acres would be fertilized. The fertilizer would be aerially applied at a rate of 150 to 300 pounds per acre.

For brief descriptions of the timber management actions mentioned above, refer to Appendix 2. Detailed descriptions of all aspects of timber management applicable to BLM lands in northern Idaho, including the WSAs, can be found in the North Idaho Timber Management EIS.

Livestock Grazing and Range Actions

The scenario for this management component is identical to that described in Alternative CL-1, All Wilderness.

Recreation

The WSA would be open to ORV use. This would allow for the continuance of approximately 75 visitor days of recreational ORV use annually. The existing three miles of trail would remain open for vehicle use.

Other recreational activities as described under Alternative CL-1 would continue at or near current levels of use (about 3,500 visitor days, annually). No recreation facilities would be constructed.

Mineral Resource Actions

No locatable minerals are reported or known to occur within the WSA and no mining claims exist in the WSA. Fault zones and host rocks within the unit are similar to those found in the Coeur-d'Alene Mining District. These conditions could lead to greater demand by exploration companies as new techniques are developed. However, it is not anticipated that these new techniques would become available and subsequent exploration activities would occur during the current planning cycle.

Leasing potential for energy and other leasable mineral resources is considered to be very low. Potential for decorative stone sales from talus slopes in the northern portion of the unit exists but interest is very low and vehicular access is unavailable. Therefore, no mineral development is anticipated in the WSA during the current planning cycle and none is projected for the future beyond the planning cycle.

Alternative CL-3, Outstanding Natural Area (ONA) (Proposed Action)

Wilderness Recommendation

The entire WSA (9,027 acres) would be recommended as nonsuitable for wilderness designation.

Outstanding Natural Area (ONA) Management

The entire WSA would be designated and managed as an ONA to preserve its unusual natural characteristics. Management objectives of an ONA are to provide the maximum amount of recreational use without damage to the area's natural features. The area may not be used in any way that would unnecessarily detract from the quality of its natural features. The scenarios developed for the other management components under this alternative sustain this goal.

Timber Management

The 4,931 acres of commercial forest lands slated for custodial management would not be managed for timber production and would not be included in allowable cut computations. Timber would be removed when necessary to protect or enhance adjacent forest lands or other resource values. Any timber removal would be done in such a way as to afford maximum protection to the site or to accomplish other resource objectives. It is not anticipated that any situations requiring timber removal would occur during the planning cycle or the foreseeable future beyond the planning cycle.

Livestock Grazing and Range Actions

Livestock use would be maintained at 36 Animal Unit Months (AUM) on 1,320 acres. No increases in livestock use are planned. Projection beyond existing planning estimates (beyond the 10 to 15 year planning cycle) indicate that it is reasonable to expect that this level of use would be maintained in the future. No livestock or range management facilities that would require maintenance are located within the WSA. No range improvements are planned for the area. Projection beyond existing planning estimates indicate that maintenance activities would not change and no additional construction of livestock and range management facilities would occur within the WSA.

Recreation

The WSA would be closed to ORV use. This action would eliminate an estimated 75 visitor days of recreational ORV use annually.

Existing trails (3 miles) would be closed to vehicle use.

The WSA would be open for recreational activities other than ORV use. These include hiking, camping, sightseeing, hunting, fishing, and berry picking. No recreation facilities exist in the WSA, however, Crystal Lake itself is a destination point for hikers using the Sheep Springs Campground and trailhead located outside the WSA. The WSA currently receives slightly less than 3,600 visitor days of use annually. About 80% of this use is concentrated at Crystal Lake and on the trail leading to it. Existing trails (3 miles) would be maintained.

Projected estimates beyond the planning cycle (10-15 years) indicate that it is reasonable to

expect a slight increase in recreational use but that this use would remain at about the 3,600 visitor day level.

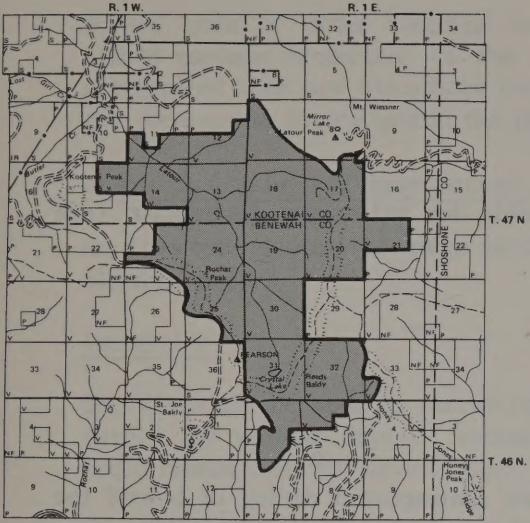
Mineral Resource Actions

No locatable minerals are reported or known to occur within the WSA and no mining claims exist in the WSA. Fault zones and host rocks within the unit are similar to those found in the Coeur d'Alene Mining District. These conditions could lead to greater demand by exploration companies as new techniques are developed. However, it is not anticipated that these new techniques would become available and subsequent exploration activities would occur during the current planning cycle.

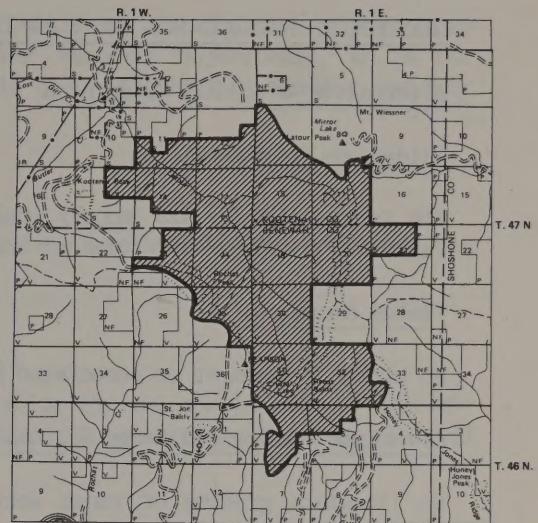
Leasing potential for energy and other leasable mineral resources is considered to be very low. Potential for decorative stone sales from talus slopes in the northern portion of the unit exists but interest is very low and vehicular access is unavailable. Therefore, no mineral development is anticipated in the WSA during the current planning cycle and none is projected for the future beyond the planning cycle.

TABLE 2-2
ALLOCATIONS/OUTPUTS FOR
CRYSTAL LAKE WSA ALTERNATIVES

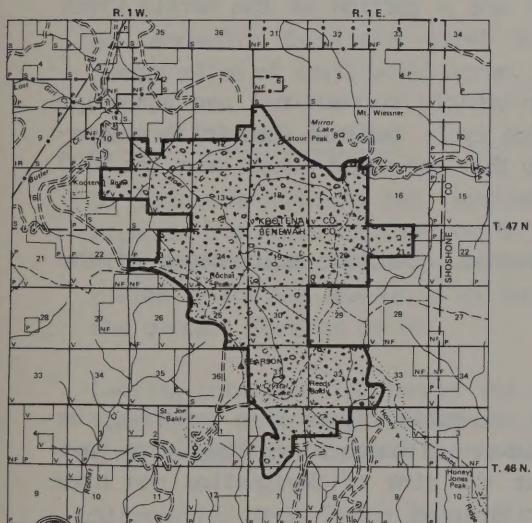
RESOURCE ACTIVITY (Units)	Alt 1 All Wilderness	Alt 2 No Action/ No Wilderness	Alt 3 ONA (Proposed Action)
Wilderness			
Suitable (acres)	9,027	0	0
Nonsuitable (acres)	0	9,027	9,027
Timber Management			
Intensive-extensive (acres)	0	4,931	0
Custodial (acres)	0	0	4,931
Annual harvest (mbf)	0	830	0
Livestock Grazing (acres leased)	1,320	1,320	1,320
AUMs	36	36	36
Recreation Opportunity Setting			
Primitive (acres)	0	0	0
Semi-primitive Nonmotorized (acres)	9,027	0	9,027
Semi-primitive Motorized (acres)	0	7,132	0
Roaded Natural (acres)	0	1,895	0
Semi-urban and Urban (acres)	0	0	0
Visual Resource Management			
Class I (acres)	9,027	0	0
Class II (acres)	0	0	9,027
Class III (acres)	0	9,027	0
Class IV (acres)	0	0	0
Vehicle Management			
Open to all vehicles (acres)	0	9,027	0
Restricted use (acres)	0	0	0
Closed to all vehicles (acres)	9,027	0	9,027



Alternative 1: ALL WILDERNESS



Alternative 2: NO ACTION/ NO WILDERNESS



**Alternative 3: ONA EMPHASIS
(PROPOSED ACTION)**

WSA Boundary
Wilderness
Intensive Timber Management
ONA

MAP 2-2 CRYSTAL LAKE ALTERNATIVES

GRANDMOTHER MOUNTAIN WSA (Unit 61-15a and 61-15b)

Alternative GM-1, All Wilderness

Wilderness Recommendation

The entire WSA (17,129 acres) would be recommended as suitable for wilderness designation (see Table 2-3 and Map 2-3).

Timber Management

No timber management or associated activities would occur.

Livestock Grazing and Range Actions

No livestock grazing or range actions currently exist or are contemplated during or beyond the planning cycle.

Recreation

The WSA would be closed to ORV use. This action would eliminate an estimated 350 visitor days of recreational ORV use annually. Existing trails (12 miles) would be closed to vehicle use.

The WSA would be open for recreational activities other than ORV use. These include hiking, camping, hunting, fishing, and sightseeing. Most of this recreational activity involves the use of the existing trails within the WSA, 9.8 miles of which are a portion of the Marble Creek National Recreation Trail System.

The WSA currently receives about 9000 visitor days of non-vehicle recreational use annually. Projected estimates for periods during and beyond the planning cycle indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain near the 9000 visitor day level.

No recreation facilities exist in the WSA and none are planned. Periodic maintenance of the twelve miles of trail would occur.

Mineral Resource Actions

Upon designation, the lands within the WSA would, subject to valid rights then existing, be withdrawn from all forms of appropriation under the mining laws. Although no mining claims have been located in the WSA, any mineral claims that exist at the time of designation and have approved plans of operation would be examined for validity verification.

Alternative GM-2, No Action/No Wilderness

Wilderness Recommendation

The entire WSA (17,129 acres) would be recommended as nonsuitable for wilderness designation.

Timber Management

The 10,000 acres of commercial forest lands in this WSA would continue to be managed under custodial guidelines and would not be managed for timber production nor be included in allowable cut computations. Timber would be removed only when necessary to protect or enhance adjacent

forest lands or other resource values. Any timber removal would be done in such a way as to afford maximum protection to the site or to accomplish other resource objectives. It is not anticipated that any situations requiring timber removal would occur during the planning cycle or the foreseeable future beyond the planning cycle.

Livestock Grazing and Range Actions

No livestock grazing or range actions currently exist or are contemplated during or beyond the planning cycle.

Recreation

The WSA would be open to recreational ORV use. This would allow for the continuance of approximately 350 visitor days of recreational vehicle use annually. The existing 12 miles of trail would remain open for vehicle use.

The WSA would be also be open for recreational activities other than ORV use. These include hiking, camping, hunting, fishing, and sightseeing. Most of this recreational activity involves the use of the existing trails within the WSA, 9.8 miles of which are a portion of the Marble Creek National Recreation Trail System.

The WSA currently receives about 9000 visitor days of non-vehicle recreational use annually. Projected estimates for periods during and beyond the planning cycle indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain near the 9,000 visitor day level.

No recreation facilities exist in the WSA and none are planned. Periodic maintenance of the twelve miles of trail would occur.

Mineral Resource Actions

No locatable minerals are reported or known to occur within the Grandmother Mountain WSA. Sub-economic resources of aluminum in anorthosite have been identified and the entire WSA has identified undiscovered resources of garnet, asbestos, and refractories. However, there are no mining claims in the WSA and it is unlikely that exploration or development activities would occur during the current planning cycle.

Leasing potential for energy and other leasable mineral resources is considered to be very low. Therefore, no mineral development is anticipated in the WSA during the current planning cycle and none is projected for the future beyond the planning cycle.

Alternative GM-3, Timber Emphasis

Wilderness Recommendation

The entire WSA (17,129 acres) would be recommended as nonsuitable for wilderness designation.

Timber Management

The 10,000 acres allocated for intensive-extensive timber management would be managed to maximize timber production on a sustained-yield basis. Timber harvest would be the primary goal of management activities on these lands.

An average annual harvest of 2100 MBF would be assured on a continuous basis through the application of timber management guidelines derived from the Management Framework Planning process and

the North Idaho Timber Management EIS (NITMEIS) (BLM 1981). In order to effect this production level, 20 miles of new road and temporary spur road construction would be anticipated to occur over a ten-year period.

Of the 10,000 acres of commercial forest land, 1973 acres would be harvested through clearcuts, partial cuts, and commercial thinnings over a ten-year period.

Ground based and cable yarding methods would also be employed on these harvest acres.

Slash disposal, primarily accomplished through burning, would occur on approximately 884 acres.

Site preparation activities such as burning and mechanical scarification would take place on about 206 acres over a ten-year period.

Approximately 282 acres would be planted with tree seedlings for timber stand regeneration.

During the decade, about 309 acres would be fertilized. The fertilizer would be aerially applied at a rate of 150 to 300 pounds per acre.

Livestock Grazing and Range Actions

No livestock grazing or range actions currently exist or are contemplated during or beyond the planning cycle.

Recreation

The scenario for this component would be identical to the one described for Alternative GM-2, No Action/No Wilderness.

Mineral Resource Actions

The scenario for this component is the same as that given for Alternative GM-2, No Action/No Wilderness.

Alternative GM-4, Timber Emphasis/Outstanding Natural Area (ONA)/Research Natural Area (RNA) (Proposed Action)

Wilderness Recommendation

The entire WSA (17,129 acres) would be recommended as nonsuitable for wilderness designation.

Outstanding Natural Area (ONA) Management

A portion (9,684 acres) of the WSA would be designated and managed as an ONA to preserve its unusual natural characteristics. Management objectives of an ONA are to provide the maximum amount of recreational use without damage to the area's natural features. The area may not be used in any way that would unnecessarily detract from the quality of its natural features. The scenarios developed for the other management components under this alternative sustain this goal on those areas to be so designated.

Research Natural Area (RNA) Management

A portion (2,905 acres) of the WSA would be designated and managed as a RNA. A RNA is established and maintained primarily for research purposes. The Lund Creek-Orphan Point area of this WSA

contains unique natural features and an ecological diversity qualifying it as a RNA.

Under RNA designation, scientists and educators would be encouraged to use this area for study purposes. Such use would be of a nondestructive manner. No vegetative manipulation (including timber harvest) or vehicle use would be permitted.

Timber Management

The 2,941 acres allocated for intensive-extensive timber management would be managed to maximize timber production on a sustained-yield basis. Timber harvest would be the primary goal of management activities on these lands.

An average annual harvest of 617 MBF would be assured on a continuous basis through the application of timber management guidelines derived from the Management Framework Planning process and the North Idaho Timber Management EIS (NITMEIS) (BLM 1981). In order to effect this production level, 6 miles of new road and temporary spur road construction would be anticipated to occur over a ten-year period.

Of the 2,941 acres of commercial forest land, 589 acres would be harvested through clearcuts, partial cuts, and commercial thinnings over a ten-year period.

Ground based and cable yarding methods would also be employed on these harvest acres.

Slash disposal, primarily accomplished through burning, would occur on approximately 264 acres.

Site preparation activities such as burning and mechanical scarification would take place on about 62 acres over a ten-year period.

Approximately 84 acres would be planted with tree seedlings for timber stand regeneration.

During the decade, about 92 acres would be fertilized. The fertilizer would be aerially applied at a rate of 150 to 300 pounds per acre.

Approximately 280 acres of commercial forest land would buffer the RNA from outside influences and be managed in a custodial manner. These buffer areas would not be managed for timber production and would not be included in allowable cut computations. Timber would be removed only when necessary to protect or enhance adjacent forest lands or other resource values. It is not anticipated that any situations requiring timber removal would occur during the planning cycle.

Livestock Grazing and Range Actions

No livestock grazing or range actions currently exist or are contemplated during or beyond the planning cycle.

Recreation

That portion of the WSA to be designated as an RNA (2,905 acres) would be closed to ORV use. This would eliminate fewer than 20 visitor days of recreational ORV use annually. About eleven and one-half miles of trail would be open to vehicle use in portions of the WSA outside the RNA boundaries.

Some seasonal restrictions to protect big game winter range and critical watersheds would be developed and imposed as site-specific conditions warrant. These restrictions could result in a decrease of up to 100 annual visitor days of ORV recreation activity.

The WSA would be open for recreational activities other than ORV use. These include hiking, camping, hunting, fishing, and sightseeing. Most of this recreational activity involves the use of the existing trails within the WSA, 9.8 miles of which are a portion of the Marble Creek National Recreation Trail System. Periodic maintenance of the existing trails would continue.

The WSA currently receives about 9,000 visitor days of non-vehicle recreational use annually. Projected estimates for periods during and beyond the planning cycle indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain near the 9000 visitor day level.

No recreation facilities exist in the WSA and none are planned. Periodic maintenance of the twelve miles of trail would occur. However, should the use of the ONA reach a point where the area's natural values are being adversely affected, minimum facilities such as pit toilets and primitive campsites may be considered. Based on projected use levels, it is improbable that the need for any minimum recreational facilities would present itself during the planning cycle or beyond in the foreseeable future.

Mineral Resource Actions

No locatable minerals are reported or known to occur within the Grandmother Mountain WSA. Subeconomic resources of aluminum in anorthosite have been identified and the entire WSA has identified undiscovered resources of garnet, asbestos, and refactones. However, there are no mining claims in the WSA and it is unlikely that exploration or development activities would occur during the current planning cycle.

Leasing potential for energy and other leasable mineral resources is considered to be very low. Therefore, no mineral development is anticipated in the WSA during the current planning cycle and none is projected for the future beyond the planning cycle.

Alternative GM-5, Partial Wilderness

Wilderness Recommendation

The major portion (12,589 acres) of the WSA would be recommended as suitable for wilderness designation while the remainder (4,540 acres) would be recommended as nonsuitable.

Timber Management

The 2,941 acres of productive forest lands (within the 4,540 acre nonsuitable portion) allocated for intensive-extensive timber management would be managed to maximize timber production on a sustained-yield basis. Timber harvest would be the primary goal of management activities on these lands.

An average annual harvest of 617 MBF would be assured on a continuous basis through the application of timber management guidelines derived from the Management Framework Planning process and the North Idaho Timber Management EIS (NITMEIS) (BLM 1981). In order to effect this production level, 6 miles of new road and temporary spur road construction would be anticipated to occur over a ten-year period.

Of the 2,941 acres of commercial forest land, 589 acres would be harvested through clearcuts, partial cuts, and commercial thinnings over a ten-year period.

Ground based and cable yarding methods would also be employed on these harvest acres.

Slash disposal, primarily accomplished through burning, would occur on approximately 264 acres.

Site preparation activities such as burning and mechanical scarification would take place on about 62 acres over a ten-year period.

Approximately 84 acres would be planted with tree seedlings for timber stand regeneration.

During the decade, about 92 acres would be fertilized. The fertilizer would be aerially applied at a rate of 150 to 300 pounds per acre.

Livestock Grazing and Range Actions

No livestock grazing or range actions currently exist or are contemplated during or beyond the planning cycle or beyond.

Recreation

That portion of the WSA recommended as suitable for wilderness designation (12,589 acres) would be closed to ORV use. This would eliminate approximately 190 visitor days of recreational ORV use annually. About three miles of trail would be open to vehicle use in that portion of the WSA remaining outside the boundary of the wilderness area.

The entire WSA would be open for recreational activities other than ORV use. These include hiking, camping, hunting, fishing, and sightseeing. Most of this recreational activity involves the use of the existing trails within the WSA, 9.8 miles of which are a portion of the Marble Creek National Recreation Trail System.

The WSA currently receives about 9000 visitor days of non-vehicle recreational use annually. Projected estimates for periods during and beyond the planning cycle indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain near the 9000 visitor day level.

No recreation facilities exist in the WSA and none are planned. Periodic maintenance of the existing trails would occur.

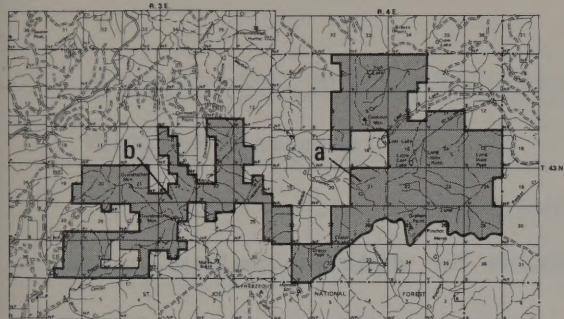
Mineral Resource Actions

Upon designation, the lands within the portion (12,589 acres) of the WSA recommended as suitable for wilderness designation would, subject to valid rights then existing, be withdrawn from all forms of appropriation under the mining laws. Although no mining claims have been located in this 12,589 portion, any mineral claims that exist at the time of designation and have approved plans of operation would be examined for validity verification.

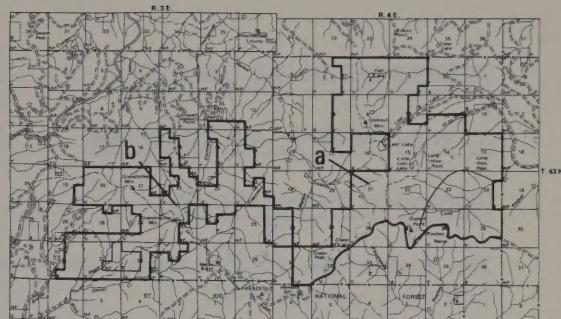
While the portion of the WSA remaining outside the wilderness area boundary would be open to mineral resource actions, the likelihood of the occurrence of any of these actions during or beyond the planning cycle is very low (see the Mineral Resource Actions scenario under Alternative GM-2, No Action/No Wilderness).

TABLE 2-3
ALLOCATIONS/OUTPUTS FOR GRANDMOTHER
MOUNTAIN WSA ALTERNATIVES

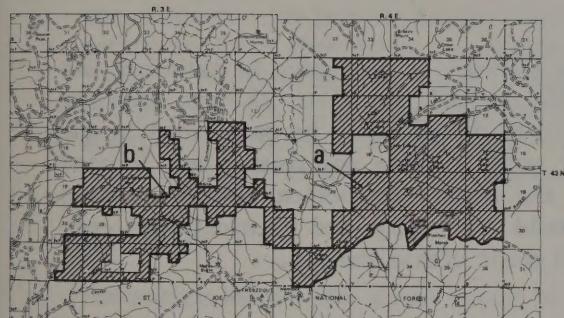
RESOURCE ACTIVITY (Units)	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
	All Wilderness	No Action/No Wilderness	Timber Emphasis	Timber/ONA/RNA (Proposed Action)	Partial Wilderness
Wilderness					
Suitable (acres)	17,129	0	0	0	12,589
Nonsuitable (acres)	0	17,129	17,129	17,129	4,540
Timber Management					
Intensive-extensive (acres)	0	0	10,000	2,941	2,941
Custodial (acres)	0	10,000	0	280	0
Annual harvest (mbf)	0	0	2,100	617	617
Livestock Grazing (acres leased)	0	0	0	0	0
AUMs	0	0	0	0	0
Recreation Opportunity Setting					
Primitive (acres)	0	0	0	0	0
Semi-primitive Nonmotorized (acres)	17,129	0	0	2,905	12,589
Semi-primitive Motorized (acres)	0	16,769	6,769	9,684	0
Roaded Natural (acres)	0	360	10,360	4,540	4,540
Semi-urban and Urban (acres)	0	0	0	0	0
Visual Resource Management					
Class I (acres)	17,129	0	0	2,905	12,589
Class II (acres)	0	15,969	0	9,684	0
Class III (acres)	0	1,160	14,569	1,980	1,980
Class IV (acres)	0	0	2,560	2,560	2,560
Vehicle Management					
Open to all vehicles (acres)	0	17,129	17,129	4,540	4,540
Restricted use (acres)	0	0	0	9,684	0
Closed to all vehicles (acres)	17,129	0	0	2,905	12,589



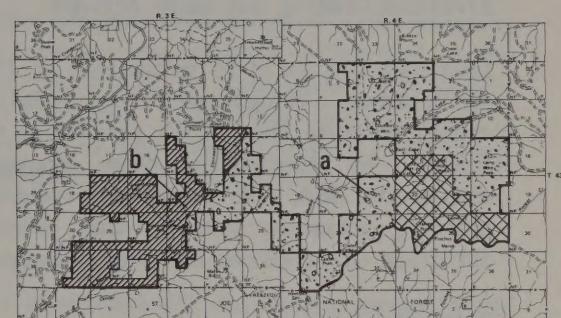
Alternative 1: ALL WILDERNESS



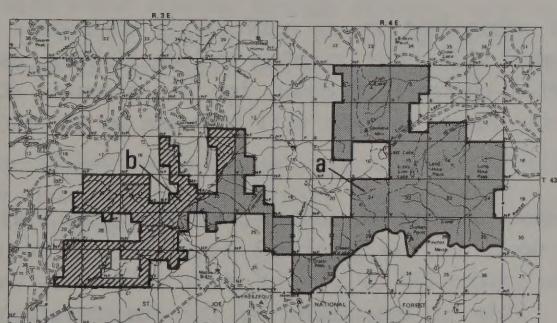
Alternative 2: NO ACTION/ NO WILDERNESS



Alternative 3: TIMBER EMPHASIS



Alternative 4: TIMBER/ ONA/ RNA EMPHASIS
(PROPOSED ACTION)



Alternative 5: PARTIAL WILDERNESS



- WSA Boundary.....
- Wilderness.....
- Intensive Timber Management.....
- ONA.....
- RNA.....

Scale in Miles

MAP 2-3 GRANDMOTHER MOUNTAIN ALTERNATIVES

SNOWHOLE RAPIDS WSA (Unit 62-1)

Alternative SR-1, All Wilderness

Wilderness Recommendation

The entire WSA (5,068 acres) would be recommended as suitable for wilderness designation (see Table 2-4 and Map 2-4).

Timber Management

No timber management or associated activities would occur.

Livestock Grazing and Range Actions

Livestock use would be maintained at 299 Animal Unit Months (AIMs). No increases in livestock use are planned. Projection beyond existing planning estimates (beyond the 10 to 15 year planning cycle) indicate that it is reasonable to expect that this level of use would be maintained in the future. No livestock or range management facilities that would require maintenance are located within the WSA. No range improvements are planned for the area. Projection beyond existing planning estimates indicate that maintenance activities would not change and no additional construction of livestock and range management facilities would occur within the WSA.

Recreation

The entire WSA (5,068 acres) would be closed to land-based vehicle use. No ORV use currently exists in the WSA. Powerboat operation is an established nonconforming use which, in accordance with BLM Wilderness Regulations, would be allowed to continue.

The Salmon River is widely recognized as an outstanding whitewater rafting river. Recreation activities primarily associated with river running include fishing, camping, hiking, hunting, and sightseeing. These activities currently account for an estimated 8500 annual visitor days of use. Recreational uses of the river corridor will increase an estimated 1700 annual visitor days by the end of the planning cycle.

Indirect or direct management techniques designed to disperse visitor use and minimize user encounters with each other would not be practical since use of the navigable river which flows through the WSA could not be controlled to a point where wilderness values would not be adversely impacted by increased use. This is compounded by the concentration of visitor use along the river, unmanaged segments of the river both upstream and downstream of the WSA, and the non-conforming allowable use of powerboats. It would be impractical to stop river users at the boundary of the WSA simply because the carrying capacity necessary to ensure the preservation of wilderness values has been exceeded.

There are no recreation facilities currently existing in the WSA and none are planned. With the exception of one primitive, unmaintained pack trail leading into the canyon on the south side of the river, no trails exist in the WSA.

Mineral Resource Actions

Upon designation, the lands within the Snowhole Rapids WSA would continue to be withdrawn from all forms of appropriation under the mining laws. These lands are presently segregated from mineral appropriation until 1991 and a formal 20-year withdrawal is pending.

Alternative SR-2, No Action/No Wilderness (Proposed Action)

Wilderness Recommendation

The entire WSA would be recommended as nonsuitable for wilderness designation.

Timber Management

No timber management currently exists or would occur in the future.

Livestock Grazing and Range Actions

Livestock use would be maintained at 299 Animal Unit Months (AUMs). No increases in livestock use are planned. Projection beyond existing planning estimates (beyond the 10 to 15 year planning cycle) indicate that it is reasonable to expect that this level of use would be maintained in the future. No livestock or range management facilities that would require maintenance are located within the WSA. No range improvements are planned for the area. Projection beyond existing planning estimates indicate that maintenance activities would not change and no additional construction of livestock and range management facilities would occur within the WSA.

Recreation

The entire WSA (5,068 acres) would be open to ORV use. No land-based ORV use occurs presently and it is unlikely to occur in the foreseeable future simply due to the rugged topographic features of the Salmon River canyon within the WSA.

The WSA would also be open to other land-based and water-based recreational activities. The Salmon River is widely recognized as an outstanding whitewater rafting river. Recreation activities primarily associated with river running include fishing, camping, hiking, hunting, and sightseeing. These activities currently account for an estimated 8500 annual visitor days of use. Recreational uses of the river corridor will increase an estimated 1700 annual visitor days by the end of the planning cycle.

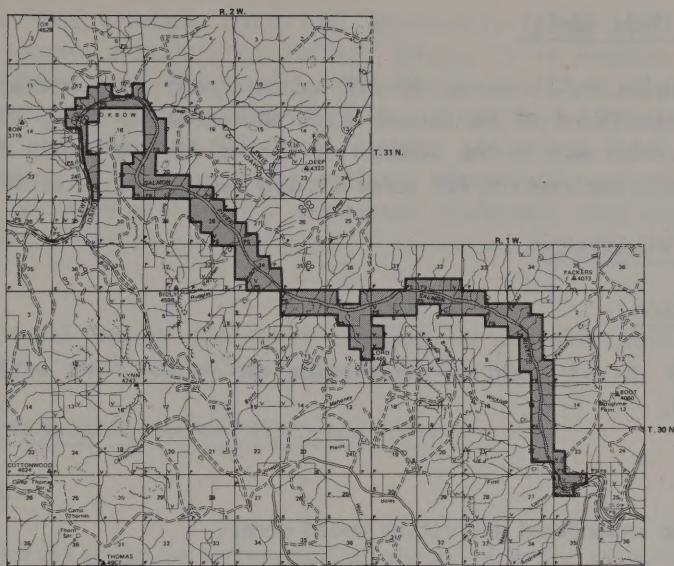
There are no recreation facilities currently existing in the WSA and none are planned. With the exception of one primitive, unmaintained pack trail leading into the canyon on the south side of the river, no trails exist in the WSA.

Mineral Resource Actions

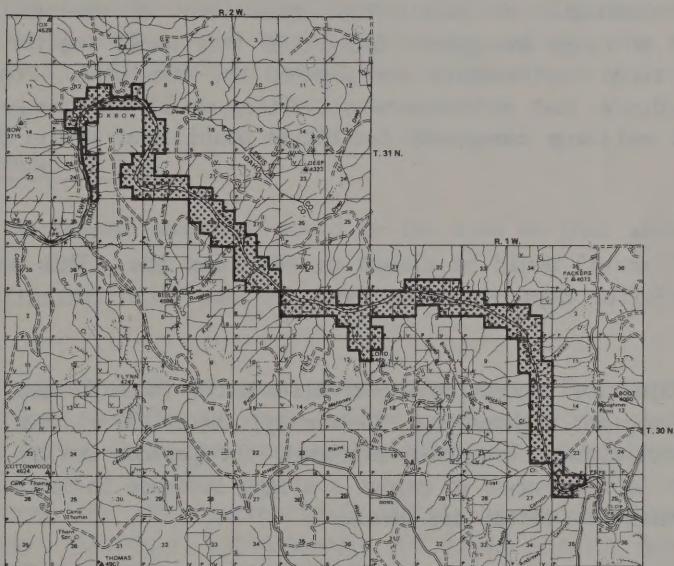
The lands within the Snowhole Rapids WSA would continue to be withdrawn from all forms of appropriation under the mining laws. These lands are presently segregated from mineral appropriation until 1991 and a formal 20-year withdrawal is pending.

TABLE 2-4
ALLOCATION/OUTPUTS FOR
SNOWHOLE RAPIDS WSA ALTERNATIVES

RESOURCE ACTIVITY (Units)	Alt 1	Alt 2
	All Wilderness	No Action/No Wilderness (Proposed Action)
Wilderness		
Suitable (acres)	5,068	0
Nonsuitable (acres)	0	5,068
Timber Management		
Intensive-extensive (acres)	0	0
Custodial (acres)	0	0
Annual harvest (mbf)	0	0
Livestock Grazing (acres leased)	5,068	5,068
AUMs	299	299
Recreation Opportunity Classes		
Primitive (acres)	0	0
Semi-primitive Nonmotorized (acres)	5,068	0
Semi-primitive Motorized (acres)	0	5,068
Roaded Natural (acres)	0	0
Semi-urban and Urban (acres)	0	0
Visual Resource Management		
Class I (acres)	5,068	0
Class II (acres)	0	5,068
Class III (acres)	0	0
Class IV (acres)	0	0
Vehicle Management (land-based)		
Open to all vehicles (acres)	0	5,068
Restricted use (acres)	0	0
Closed to all vehicles (acres)	5,068	0



Alternative 1: ALL WILDERNESS



**Alternative 2: NO ACTION/ NO WILDERNESS
(PROPOSED ACTION)**

WSA Boundary.....
 Wilderness.....
 Semi-primitive Motorized Recreation.....

Scale in Miles

MAP 2-4 SNOWHOLE RAPIDS ALTERNATIVES

MARSHALL MOUNTAIN WSA (Unit 62-1)

Note: This WSA contains 6,524 acres of BLM administered land within its boundaries. When Congress established the River of No Return Wilderness area in 1979, 720 acres of the Marshall Mountain WSA were included within the borders of the wilderness area. Further descriptions and analysis of this WSA will exclude the 720 acres already designated as wilderness.

Alternative MM-1, All Wilderness

Wilderness Recommendation

The entire WSA (5,804 acres) would be recommended as suitable for wilderness designation (see Table 2-5 and Map 2-5).

Timber Management

No timber management or associated activities would occur.

Livestock Grazing and Range Actions

Livestock use would be maintained at 8 AUMs on 150 acres. No increases in livestock use are planned. Projection beyond existing planning estimates (beyond the 10 to 15 year planning cycle) indicate that it is reasonable to expect that this level of use would be maintained in the future. No livestock or range management facilities that would require maintenance are located within the WSA. No range improvements are planned for the area. Projection beyond existing planning estimates indicate that maintenance activities would not change and no additional construction of livestock and range management facilities would occur within the WSA.

Recreation

The entire WSA (5,804 acres) would be closed to vehicular use. This action would eliminate an estimated 10 annual visitor days of recreational ORV use which currently occurs in association with hunting.

The WSA would remain open for recreational activities other than ORV use. These include hunting, fishing, hiking, camping, and sightseeing. Currently, about 100 visitor days of use annually is attributed to these activities. Projected estimates for periods during and beyond the planning cycle indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain near the 100 visitor day level.

Mineral Resource Actions

Upon designation as wilderness, the lands within the WSA would, subject to valid rights then existing, be withdrawn from all forms of appropriation under the mining laws. Currently there are approximately 150 lode mining claims in the unit; however, none have been developed into operational sites and no plans of operation have been filed. The lack of activity on these claims is primarily due to the depressed market for gold, silver and base metals and the marginal quality and quantity of the ore bodies in the vicinity of these claims. New ore extraction and processing technology could improve the economic potential of these claims; however, most experts agree that affordable advanced mining technology would not be available during this planning cycle or in the near future following it (15-20 years). For the reasons mentioned above, no development or mineral production is expected to occur during or immediately following the planning cycle and no ground disturbing activities (except for normal assessment work) are anticipated to occur.

In the unlikely event that economic conditions drastically change and new ore extraction and processing technology becomes available in the near future, it is possible that 50% of the claims in this unit could be found to be valid and could undergo some level of development. This would result in the construction of approximately 95 miles of road and surface disturbance (for roads, excavations, etc.) on approximately 375 acres. While exact locations for roads and surface disturbance are not known, it is assumed the activity would be dispersed throughout the WSA. As mentioned previously, any such action in a designated wilderness area would be subject to valid rights, partially documented by an approved plan of operation, existing at the time of designation as wilderness.

There are no known mineral values for either leasable or saleable minerals in the WSA and no leases or permits would be issued under this wilderness alternative.

Alternative MM-2, No Action/No Wilderness (Proposed Action)

Wilderness Recommendation

The entire WSA (5,804 acres) would be recommended as nonsuitable for wilderness designation.

Timber Management

The 3,920 acres slated for custodial management would not be managed for timber production and would not be included in allowable cut computations. Timber would be removed when necessary to protect or enhance adjacent forest lands or other resource values. Any timber removal would be done in such a manner as to afford maximum protection to the site or to accomplish other resource objectives.

Livestock Grazing and Range Actions

The scenario for this management component would be the same as that described under Alternative MM-1, All Wilderness.

Recreation

The entire WSA (5,804 acres) would be open to vehicular use. The current estimated 10 annual visitor days of recreational vehicle use would continue and is not expected to increase at a rate worthy of consideration during or in the foreseeable future beyond the planning cycle.

The WSA would also be open for other recreational activities including hunting, fishing, hiking, camping, and sightseeing. Currently, approximately 100 annual visitor days of use is attributed to these activities. Projections for periods during and beyond the planning cycle indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain near the 100 visitor day level.

Mineral Resource Actions

There are no known mineral values for either leasable or saleable minerals in the WSA. It is very unlikely that any leases or permits would be issued during or beyond the planning cycle.

This unit is part of the historic Marshall Mountain Mining District where hundreds of mining claims were staked and many successful mining operations flourished in the early 1900's through

the 1950's. None of the successful operating mines are located within the WSA, but there are over 15 mine sites (a few of which are still active) within 10 miles of the WSA. Currently there are approximately 150 lode mining claims in the WSA. None of these claims have been developed into operational sites and no plans of operation have been filed. The lack of activity on these claims is primarily due to the depressed market for gold, silver, and base metals and the marginal quality and quantity of the ore bodies in the vicinity of these claims. Greatly improved market conditions and/or new mining technology could improve the economic potential of these claims making future development possible. Recent studies indicate, however, that conditions suitable for development of these claims will probably not occur in the near future (15-20 years) and no ground disturbing activities (except for normal assessment work) are anticipated to occur.

Should economic conditions drastically change and new ore extraction and processing technology become available in the near future, it is possible that 50% of the claims in this unit could be found to be valid and could undergo some level of development. This would result in the construction of approximately 95 miles of road and surface disturbance (for roads, excavations, etc.) on approximately 375 acres. While exact locations for roads and surface disturbance are not known, it is assumed the activity would be dispersed throughout the WSA.

Alternative MM-3, Timber Emphasis

Wilderness Recommendation

The entire WSA (5,804 acres) would be recommended as nonsuitable for wilderness designation.

Timber Management

The 3,920 acres allocated for intensive-extensive timber management would be managed to maximize timber production on a sustained-yield basis. Timber harvest would be the primary goal of management activities on these lands.

An average annual harvest of 724 MBF would be assured on a continuous basis through the application of timber management guidelines derived from the Management Framework Planning process and the North Idaho Timber Management EIS (NITMEIS) (BLM 1981). In order to effect this production level, 7.8 miles of new road and temporary spur road construction would be anticipated to occur over a ten-year period.

Of the 3,920 acres of commercial forest land, 775 acres would be harvested through clearcuts, partial cuts, and commercial thinnings over a ten-year period.

Ground based and cable yarding methods would also be employed on these harvest acres.

Slash disposal, primarily accomplished through burning, would occur on approximately 347 acres.

Site preparation activities such as burning and mechanical scarification would take place on about 81 acres over a ten-year period.

Approximately 111 acres would be planted with tree seedlings for timber stand regeneration.

During the decade, about 121 acres would be fertilized. The fertilizer would be aerially applied at a rate of 150 to 300 pounds per acre.

Livestock Grazing and Range Actions

The scenario for this management component is identical to that given under Alternative MM-1, All Wilderness.

Timber Management

The 2,280 acres allocated for intensive-extensive timber management would be managed to maximize timber production on a sustained-yield basis. Timber harvest would be the primary goal of management activities on these lands.

An average annual harvest of 421 MBF would be assured on a continuous basis through the application of timber management guidelines derived from the Management Framework Planning process and the North Idaho Timber Management EIS (NITMEIS) (BLM 1981). In order to effect this production level, 4.5 miles of new road and temporary spur road construction would be anticipated to occur over a ten-year period.

Of these 2,280 acres of commercial forest land, 443 acres would be harvested through clearcuts, partial cuts, and commercial thinnings over a ten-year period.

Ground based and cable yarding methods would also be employed on these harvest acres.

Slash disposal, primarily accomplished through burning, would occur on approximately 202 acres.

Site preparation activities such as burning and mechanical scarification would take place on about 46 acres over a ten-year period.

Approximately 63 acres would be planted with tree seedlings for timber stand regeneration.

During the decade, about 69 acres would be fertilized. The fertilizer would be aerially applied at a rate of 150 to 300 pounds per acre.

No timber management activities would occur on the 1,680 acres recommended as suitable for wilderness designation under this alternative.

Livestock Grazing and Range Actions

Activities for this component would be identical to Alternative MM-1 where livestock use would be maintained at 8 AUMs on 150 acres with no projects or increased use planned.

Recreation

The northern portion of the WSA (1,680 acres) would be closed to vehicular use. Although no reported ORV use occurs in this section of the WSA, this action would prohibit future use.

The majority of the WSA (4,124 acres) would be open to vehicular use. The current estimated 10 annual visitor days of recreational ORV use (primarily associated with hunting) would continue at that rate.

The entire WSA would remain open for other recreational activities other than ORV use. These include hunting, fishing, hiking, camping, and sightseeing. Currently, about 100 visitor days of use annually is attributed to these activities. Projected estimates for periods during and beyond the planning cycle indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain near the 100 visitor day level.

Mineral Resource Actions

Upon designation, the 1,680 acres recommended for wilderness would be withdrawn from all forms of appropriation under the mining laws, subject to existing valid rights at that time. Existing

Recreation

The northern portion of the WSA (1,680 acres) would be closed to vehicular use. Although no reported ORV use occurs in this section of the WSA, this action would prohibit future use.

The majority of the WSA (4,124 acres) would be open to vehicular use. The current estimated 10 annual visitor days of recreational ORV use (primarily associated with hunting) would continue at that rate.

The entire WSA would remain open for other recreational activities other than ORV use. These include hunting, fishing, hiking, camping, and sightseeing. Currently, about 100 visitor days of use annually is attributed to these activities. Projected estimates for periods during and beyond the planning cycle indicate that it is reasonable to expect a slight increase in recreational use but that this use would remain near the 100 visitor day level.

Mineral Resource Actions

Upon designation, the 1,680 acres recommended for wilderness would be withdrawn from all forms of appropriation under the mining laws, subject to existing valid rights at that time. Existing mineral claims having approved plans of operation at the time of designation would be examined to verify their validity. Currently there are approximately 74 lode mining claims in the 1,680 acre area which would be recommended for wilderness designation in this alternative. None of these claims have been developed into operational sites and no plans of operation have been filed.

There are approximately 76 mining claims located on the remaining 4,124 acres of the WSA. Just as above, none of these claims have been developed into operational sites and no plans of operation have been filed. While improved market conditions and/or new mining technology could provide a favorable climate for future development, such conditions will probably not occur in the near future (15-20 years).

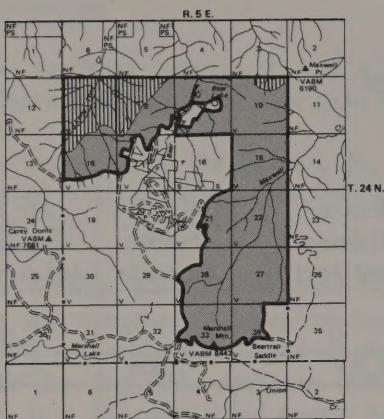
In the unlikely event that economic conditions drastically change and new ore extraction and processing technology becomes available in the near future, it is possible that 50% of the claims in that portion recommended as suitable and 50% of the claims in that portion not recommended as suitable for wilderness designation could be found to be valid and could undergo some level of development. This would result in the construction of approximately 47 miles of road and surface disturbance (for roads, excavations, etc.) on approximately 187 acres in the portion recommended as suitable and 48 miles on 188 acres in the portion not recommended as suitable. While exact locations for roads and surface disturbance are not known, it is assumed the activity would be dispersed throughout the WSA. As mentioned previously, any such action in a designated wilderness area would be subject to valid rights, partially documented by an approved plan of operation, existing at the time of designation as wilderness.

There are no known mineral values for either leasable or saleable minerals in the WSA and no development is anticipated.

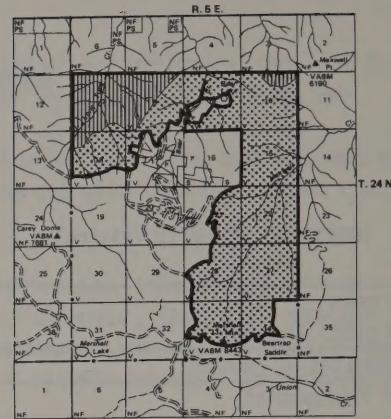
TABLE 2-5
ALLOCATIONS/OUTPUTS FOR
MARSHALL MOUNTAIN WSA ALTERNATIVES

RESOURCE ACTIVITY (Units)	Alt 1 All Wilderness	Alt 2 No Action/ No Wilderness (Proposed Action)	Alt 3 Timber Emphasis	Alt 4 Partial Wilderness
Wilderness				
Suitable (acres)	5,804	0	0	1,680
Nonsuitable (acres)	0	5,804	5,804	4,124
Timber Management				
Intensive-extensive (acres)	0	0	3,920	2,280
Custodial (acres)	0	3,920	0	0
Annual harvest (mbf)	0	0	724	421
Livestock Grazing (acres leased)	150	150	150	150
AUMs	8	8	8	8
Recreation Opportunity Classes				
Primitive (acres)	0	0	0	0
Semi-primitive Nonmotorized (acres)	5,804	0	0	1,680
Semi-primitive Motorized (acres)	0	5,804	0	4,124
Roaded Natural (acres)	0	0	5,804	0
Semi-urban and Urban (acres)	0	0	0	0
Visual Resource Management				
Class I (acres)	5,804	0	0	1,680
Class II (acres)	0	5,804	0	0
Class III (acres)	0	0	5,804	4,124
Class IV (acres)	0	0	0	0
Vehicle Management				
Open to all vehicles (acres)	0	5,804	5,804	4,124
Restricted use (acres)	0	0	0	0
Closed to all vehicles (acres)	5,804	0	0	1,680

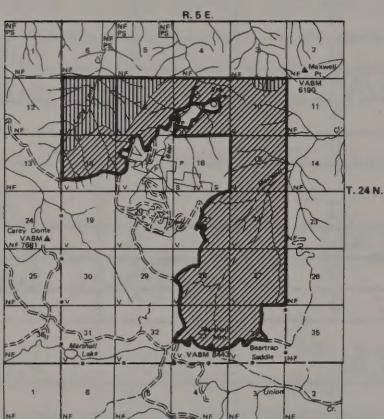




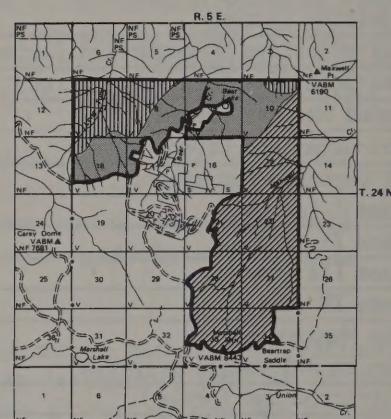
**Alternative 1:
ALL WILDERNESS**



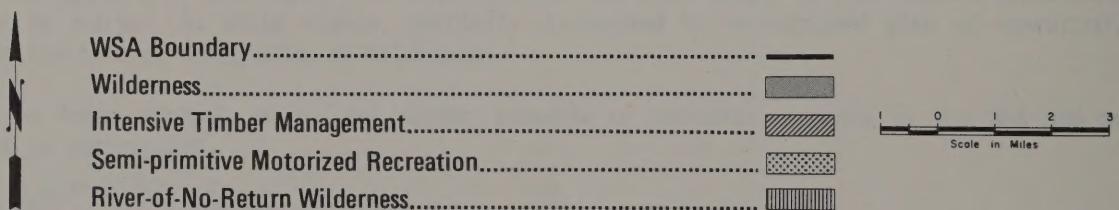
**Alternative 2:
NO ACTION/ NO WILDERNESS
(PROPOSED ACTION)**



**Alternative 3:
TIMBER EMPHASIS**



**Alternative 4:
PARTIAL WILDERNESS**



MAP 2-5 MARSHALL MOUNTAIN ALTERNATIVES

Table 2-6
SUMMARY OF IMPACTS BY ALTERNATIVE

IMPACT TOPICS	Selkirk Crest WSA	
	Alternative SC-1	Alternative SC-2
(N/A under Alternative column indicates that particular topic was not an issue for that alternative)	All Wilderness	No Action/No Wilderness (Proposed Action)
Wilderness Values	Protected	Slight loss of solitude from ORV use
Development of Mineral Resources	Withdrawn from mineral entry (720 acres).	Potential for exploration and development retained.
Timber Industry and Local Economy: Potential harvest (MBF) Potential jobs	N/A	N/A
Recreational ORV Use	N/A	Current 10 annual visitor days would be unchanged.
Soil: Loss (tons/10-years) Loss (% of current BLM-EIS area totals)	N/A	N/A
Water Quality: Sediment Yield Increase (tons/10-years) Sediment Yield Increase (% of current yields in EIS area) Water Yield Increase (acre/ft/year)	N/A	N/A
Water Supply	N/A	N/A
Fish: Sediment reaching fish habitat (tons/10-year)	N/A	N/A
Vegetation: Eliminate Productivity (acres/10-years) Modification of Succession (acres/10-years)	N/A	N/A
Mammals and Birds: Loss of Habitat Capability (head/10-years) Elk Deer	N/A	N/A
Archaeological Resources	N/A	N/A
Scenic Quality	No Change	No Change

Table 2-6, Continued
SUMMARY OF IMPACTS BY ALTERNATIVE

IMPACT TOPICS (N/A under Alternative column indicates that particular topic was not an issue for that alternative)	Crystal Lake WSA		
	Alternative CL-1 All Wilderness	Alternative CL-2 No Action/No Wilderness	Alternative CL-3 Outstanding Natural Area (Proposed Action)
Wilderness Values	Protected	Values lost on 4,931 acres. Naturalness & solitude reduced on remainder.	Protected
Development of Mineral Resources	Withdrawn from mineral entry (9,027 acres).	No Impact	No Impact
Timber Industry and Local Economy:			
Potential harvest (MBF)	0	830	0
Potential jobs	0	6	0
Recreational ORV Use	Closed to ORV use. 75 annual visitor days foregone	Benefit from 9.8 miles of new road.	Closed to ORV use. 75 annual visitor days foregone.
Soil:	N/A		N/A
Loss (tons/10-years)		850	
Loss (% of current BLM-EIS area totals)		.2	
Water Quality:	N/A		N/A
Sediment Yield Increase (tons/10-years)		576	
Sediment Yield Increase (% of current yields in EJS area)		.4	
Water Yield Increase (acre/ft/year)		25	
Water Supply	N/A	No Impact	N/A
Fish:			N/A
Sediment reaching fish habitat (tons/10-year)	N/A	65	
Vegetation:			N/A
Eliminate Productivity (acres/10-years)	N/A	46	
Modification of Succession (acres/10-years)		976	
Mammals and Birds:	N/A		N/A
Loss of Habitat Capability (head/10-years)			
Elk		12	
Deer		3	
Archaeological Resources	N/A	No Impact	N/A
Scenic Quality	N/A	Slight adverse impact on 4,931 acres	N/A

Table 2-6, Continued
SUMMARY OF IMPACTS BY ALTERNATIVE

IMPACT TOPICS (N/A under Alternative column indicates that particular topic was not an issue for that alternative)	Grandmother Mountain WSA				
	Alternative GM-1 All Wilderness	Alternative GM-2 No Action/No Wilderness	Alternative GM-3 Timber Emphasis	Alternative GM-4 Timber Emphasis/Outstanding Natural Area/ Research Natural Area (Proposed Action)	Alternative GM-5 Partial Wilderness
Wilderness Values	Protected	Naturalness & solitude reduced throughout WSA by ORV use.	Values lost on 10,000 acres. Naturalness & solitude reduced on remainder.	Protected on 2,905 acres. Values lost on 4,540 acres. Naturalness & solitude reduced on 9,684 acres.	Protected on 12,589 acres. Values lost on 4,540 acres.
Development of Mineral Resources	Withdrawn from mineral entry (17,129 acres).	No Impact	No Impact	No Impact	12,589 acres withdrawn from mineral entry.
Timber Industry and Local Economy:					
Potential harvest (MBF)	0	0	2100	617	617
Potential jobs	0	0	15	5	5
Recreational ORV Use:	Closed to ORV use, 350 annual visitor days foregone.	Slight benefit from trail maintenance.	Slight benefit from 20 miles new road.	2,905 acres closed, 9,684 acres restricted use-120 visitor days lost (potential).	12,589 acres closed to ORV use-190 visitor days lost.
Soil:	N/A	N/A	1731 .4	510 .12	510 5
Loss (tons/10-years)					
Loss (% of current BLM-EIS area totals)					
Water Quality:	N/A	N/A			
Sediment Yield Increase (tons/10-years)			1173 .8	346 .24	346 .24
Sediment Yield Increase (% of current yields in EIS area)			50	15	15
Water Yield Increase (acre/ft/year)					
Water Supply	N/A	N/A	No Impact	No Impact	No Impact
Fish:	N/A	N/A			
Sediment reaching fish habitat (tons/10-year)			680	200	200
Vegetation:	N/A	N/A			
Eliminate Productivity (acres/10-years)			92	27	27
Modification of Succession (acres/10-years)			1973	589	589
Mammals and Birds:	N/A	N/A			
Loss of Habitat Capability (head/10-years)					
Elk			23	7	7
Deer			4	2	2
Archaeological Resources	N/A	N/A	No Impact	No Impact	No Impact
Scenic Quality	N/A	N/A	Slight adverse Impact on 10,000 acres.	Slight adverse Impact on 4,540 acres.	Slight adverse Impact on 4,540 acres.

Table 2-6, Continued
SUMMARY OF IMPACTS BY ALTERNATIVE

IMPACT TOPICS	Snowhole Rapids WSA	
	Alternative SR-1 All Wilderness	Alternative SR-2 No Action/No Wilderness (Proposed Action)
(N/A under Alternative column indicates that particular topic was not an issue for that alternative)		
Wilderness Values	Solitude would continue to be degraded by powerboat use.	Solitude degraded by powerboat use.
Development of Mineral Resources	Continued withdrawal of 5,068 acres.	Continued withdrawal of 5,068 acres.
Timber Industry and Local Economy:	N/A	N/A
Potential harvest (MBF)		
Potential jobs		
Recreational ORV Use	No Impact	No Impact
Soil:	N/A	N/A
Loss (tons/10-years)		
Loss (% of current BLM-EIS area totals)		
Water Quality:	N/A	N/A
Sediment Yield Increase (tons/10-years)		
Sediment Yield Increase (% of current yields in EIS area)		
Water Yield Increase (acre/ft/year)		
Water Supply	N/A	N/A
Fish:	N/A	N/A
Sediment reaching fish habitat (tons/10-year)		
Vegetation:	N/A	N/A
Eliminate Productivity (acres/10-years)		
Modification of Succession (acres/10-years)		
Mammals and Birds:	N/A	N/A
Loss of Habitat Capability (head/10-years)		
Elk		
Deer		
Archaeological Resources	N/A	N/A
Scenic Quality	N/A	N/A

Table 2-6, Continued
SUMMARY OF IMPACTS BY ALTERNATIVE

IMPACT TOPICS (N/A under Alternative column indicates that particular topic was not an issue for that alternative)	Marshall Mountain WSA			
	Alternative M-1 All Wilderness	Alternative M-2 No Action/No Wilderness (Proposed Action)	Alternative M-3 Timber Emphasis	Alternative M-4 Partial Wilderness
Wilderness Values	Protected	Slight adverse impacts to solitude & naturalness from ORV use. Potential for value loss if mineral development commences.	Values lost on 3,920 acres. Naturalness & solitude reduced on remainder.	Protected on 1,680 acres. Values lost on 2,280 acres. Naturalness & Solitude reduced on 1,844 acres.
Development of Mineral Resources	Withdrawn from mineral entry (5,804 acres).	No Impact	No Impact	1,680 acres withdrawn. No impact on remainder.
Timber Industry and Local Economy:				
Potential harvest (MBF)	0	0	724	421
Potential jobs	0	0	5	3
Recreational ORV Use	Closed to ORV use. 10 annual visitor days foregone.	No Impact	Benefit from 7.8 miles new road.	Benefit from 4.5 miles new road.
Soil:	N/A	N/A		
Loss (tons/10-years)			671	390
Loss (% of current BLM-EIS area totals)			.16	.1
Water Quality:	N/A	N/A		
Sediment Yield Increase (tons/10-years)			460	267
Sediment Yield Increase (% of current yields in EIS area)			.3	.17
Water Yield Increase (acre/ft/year)			20	11
Water Supply	N/A	N/A	No Impact	No Impact
Fish:	N/A	N/A		
Sediment reaching fish habitat (tons/10-year)			0	0
Vegetation:	N/A	N/A		
Eliminate Productivity (acres/10-years)			37	21
Modification of Succession (acres/10-years)			775	443
Mammals and Birds:	N/A	N/A		
Loss of Habitat Capability (head/10-years)				
Elk			3	2
Deer			2	1
Archaeological Resources	N/A	N/A	No Impact	No Impact
Scenic Quality	N/A	N/A	Slight adverse impact on 3,920 acres.	Slight adverse impact on 2,280 acres

CHAPTER 3 AFFECTED ENVIRONMENT

INTRODUCTION

The Amendment/EIS area is basically the northern panhandle of Idaho, extending from the Canadian border on the north to the Payette National Forest on the south. This area contains a topographic profile ranging from river canyon areas with elevations less than 1,000 feet above sea level to mountain peaks with elevations exceeding 8,400 feet. The region includes some of the most varied geology in Idaho. North of Coeur d'Alene, the area is dominated by the Kaniksu Batholith to the west and the Precambrian Belt Supergroup to the east. Much of this northern area has been heavily affected by glaciation. South to Lewiston, the geology consists primarily of the Precambrian Belt Supergroup with some Columbia River basalt along the western part of the state. Further south, the Columbia River basalt flows have covered most of the area.

The majority of land in the EIS area, 77.3 percent, is in forest use; 11.3 percent is in range-land use; 9.5 percent is in agricultural use; and the remaining 1.9 percent is in urban use. Despite the large federal ownership of land in the area (61 percent), the WSAs contain less than .3 percent of the total land area. These WSAs are widely scattered throughout the area. Because of the intermingling with private, state, and National Forest lands and due to the absence of large blocks of land under BLM management, it is unlikely that any particular social system or lifestyle is primarily dependent on BLM land for survival.

The climate of the Coeur d'Alene District is associated with the southerly and easterly drift of weather systems that develop in the northern and central Pacific Ocean. In the winter, storms pass over the region causing a distinctly wet climate. During summer, however, storms pass farther north causing a relatively dry climate. In general, the eastward movement of the marine air keeps temperatures moderate except when continental high pressures reverse the general flow to a westerly direction. This brings periods of hot, dry air in the summer and cold weather in the winter.

Topographic features create localized microclimates through the district. The widely ranging elevations, the rapidly changing orientation of the mountains and rivers, and the intervening topographic barriers all add to the climatic variations. The Clearwater River basin, for example is so oriented that moist Pacific air enters the lower basin and is subjected to vertical lifting. As the air moves over the mountains, considerable precipitation is produced. Another example is the highly variable surface winds caused by the differing topography.

SELKIRK CREST

INTRODUCTION

The Selkirk Crest WSA (refer to Map 1-1) is located 18 miles northwest of Bonners Ferry, Idaho. It contains 720 acres of public land. A Kaniksu National Forest RARE II area (1-125) that has not been recommended for wilderness designation borders the unit. Private lands form the remaining boundaries.

The WSA is steep and heavily vegetated with a wide variety of species. Elevation ranges from near 1,800 feet to almost 4,500 feet at the National Forest boundary. Numerous small drainages break up the otherwise uniform appearance of the area. Areas of heavy forest cover dominate the lower slopes of the WSA, while areas of bare rock and brush cover are found on the upper reaches.

WILDERNESS VALUES

During the wilderness inventory, the WSA was found to exhibit the wilderness characteristic of naturalness. The characteristics of solitude, primitive and unconfined recreation, and size were found to exist only in conjunction with the adjoining Rare II area (1-125) administered by the Forest Service. For an evaluation of these wilderness characteristics refer to Appendix 1.

ENERGY AND MINERAL RESOURCES

There are no known energy resources or mineral values for either locatable or leasable minerals within the WSA. Reserves of subeconomic saleable materials such as peat, sand, and gravel have been identified within the WSA. There are no mining claims in the WSA.

TIMBER MANAGEMENT

The timber on this unit is mixed species second growth and of poor quality due to the harshness of the site. The standing timber volume in this WSA is approximately .7 million board feet which is less than 1/10 of 1 percent of the total federal regional standing volume.

For the timber production capability of the unit, refer to Table 3-2.

ECONOMICS

The Selkirk Crest WSA is located within Boundary County. Total employment for the county was 1,614 persons employed in 1980 of which 332 were employed in the lumber industry (Idaho Department of Employment 1981). Corresponding total wages were \$15,816,100. Of this, \$5,090,200 were timber industry associated. By 1984 lumber related employment had dropped to about 266 with \$4,072,160 paid in related wages.

RECREATION

The WSA provides a roaded natural recreation setting. Access is limited and no unique attractions or activity opportunities are available. Recreational activities which occur on the WSA include: ORV use, hiking, hunting, camping, and sightseeing. Current recreation demand on this WSA is very low.

SOILS

Of the 720 acres in the Selkirk Crest WSA, approximately 50 percent is rock outcrop. The rest of the unit consists of moderately deep loam formed from well drained glacial drift (primarily Rock Outcrop-Pend Oreille association).

WATER RESOURCES

The WSA includes a very small segment on Parker Creek (less than 1/10 of a mile) but most of the unit drains by intermittent channels onto the Kootenai plain. The mean annual precipitation is at least 30 to 35 inches per year. The water yield varies depending on elevation gradients. A high water yield in relation to the amount of precipitation would be expected due to the steep, rocky nature of the area. The watershed condition is fairly stable.

VEGETATION

Table 3-1 summarizes the vegetation for this unit. There are no known state-listed rare, or federally-listed threatened, or endangered species in the WSA.

TABLE 3-1
SELKIRK CREST VEGETATION

Habitat Type Series	Acres	Seral Tree Species	Primary Brush, Grasses, Forbes
Douglas-fir	165	ponderosa pine, western larch	ninebark, oceanspray, ceanothus, bluegrass
Western Red Cedar	80	Western hemlock, grand fir, western larch	pachistima, blueberry, western meadowrue, Columbia brome
Subalpine fir	20	white pine, Englemann spruce	menziesia, shodendron, elk sedge, honeysuckle
Other	455		beargrass, huckleberry, mosses, lichens

WILDLIFE

The area contains 160 acres of mountain goat winter range. The number of animals in the goat population is unknown but thought to be small. The WSA is also considered important habitat for white-tailed deer. Approximately 100 white-tailed deer winter in the vicinity of the BLM tracts. No sensitive, threatened or endangered wildlife species are known to inhabit this WSA.

CULTURAL RESOURCES

There are no known cultural resources in the WSA. The general subsistence pattern for both the prehistoric and historic utilization consists of settlements in the river valleys and seasonal utilization of adjoining mountains. Because of the steep slopes in the WSA, it is unlikely that it was used as an occupation site.

There were four homesteads filed in portions of this unit between 1919 and 1928. All were cancelled within 5 years. Because of the short term of these filings it is unlikely that the individuals making them actually occupied the land.

VISUAL RESOURCES

The visual resources inventory rates this entire WSA as containing B Class scenery with moderate user sensitivity.

Table 3-2
TIMBER PRODUCTION CAPABILITY CLASSIFICATION - 1979
WSA (Acres)

<u>Category</u>	Selkirk Crest (61-1)	Crystal Lake (61-10)	Grandmother Mtn. (61-15)	Snowhole Rapids (62-1)	Marshall Mtn. (62-10)
Productive forest lands available for management					
Non-problem sites ¹	13	2,062	7,414	67	3,920
Restricted use sites ²	153	2,869	4,830	0	0
	<u>166</u>	<u>4,931</u>	<u>12,244</u>	<u>67</u>	<u>3,920</u>
% of regional federal forest lands available for management	.005	.155	.384	.002	.123
Productive forest lands excluded from management ³	315	756	1,856	0	0
Non-productive forest lands ⁴	149	0	1,483	219	1,884
Non-forest lands ⁵	90	3,340	1,546	4,782	0
Total lands administered by BLM	720	9,027	17,129	5,068	5,804

1 Non-problem sites are productive forest sites characterized by stable soils and bedrock. They can be logged by normal ground based and cable practices, and reforestation can be established within 5 years after final harvest using normal techniques.

2 Restricted use sites are productive forest sites that need special logging practices or reforestation techniques to preserve soil productivity or ensure reforestation of the site within 5 years after final harvest.

3 Productive forest lands excluded from management are productive forest lands where the application of special logging practices or reforestation techniques would still result in degradation of the site or failure of the areas to reforest within 5 years after harvest. These lands are not included in the allowable cut base.

4 Non-productive forest land is not capable of producing 20 cubic feet of wood per acre per year or is only capable of producing non-commercial species of trees.

5 Non-forest lands are incapable of being 16.7 percent stocked with forest trees or are lands developed for nontimber uses.

*Regional Context: In the EIS area (Coeur d'Alene District) the federal government administers approximately 3,185,000 acres of productive forest lands available for timber management. Of this total, the Forest Service manages about 3,070,000 acres (96.4%), the BLM 65,000 acres (2%), and other federal agencies 50,000 acres (1.6%).

CRYSTAL LAKE

INTRODUCTION

The Crystal Lake WSA (refer to Map 1-2) is located 10 miles northeast of St. Maries. The WSA contains approximately 9,027 acres of public land.

The northern border of the unit is formed by private land and a portion of the Twin Crags Road. An irregular pattern of private land and portions of the Rochat Road define the western and southern borders. Portions of the Reeds Gulch and Pine Creek roads, and private land constitute the eastern boundary.

The Rochat Road is a good quality, gravel surfaced route. The remaining roads are of lesser quality with natural surface.

The unit contains a landscape of varied character. Bare talus peaks descend sharply to Latour Creek some 3,000 feet below Reeds Baldy, the highest peak in the unit. The slopes in the upper drainages are predominately vegetated with a thin to moderately stocked mixed coniferous stand. Toward the lower end of the unit the density of this stand steadily increases. The unit contains the major portion of the Latour Creek drainage including its headwaters at Crystal Lake. Bare areas of talus material are common in the upper end of the drainage. The basin below Crystal Lake contains the site of a past fire and now supports a dense brush cover.

WILDERNESS VALUES

During the wilderness inventory, the WSA was found to exhibit the wilderness characteristics of size, naturalness, solitude, and primitive recreation. It also contains special values of educational and historical interest. For an evaluation of these wilderness characteristics refer to Appendix 1.

ENERGY AND MINERAL RESOURCES

No energy resources are known to exist in the area. There are no known mineral values for either locatable or leasable minerals. Fault zones within the unit and favorable host rocks on the lower Belt Supergroup are similar to those in the Coeur d'Alene Mining District. These conditions could lead to greater demand by exploration companies as new techniques are developed.

There are no leases or pending applications for leasable minerals. There are no mining claims located within the unit but there are abandoned adits located west and north of the WSA that were explored in the 1930s. Talus slopes in the northern portion of the unit contain large quantities of stone which has the potential to be used for decorative purposes. Demand for this stone is very low and vehicular access is unavailable.

TIMBER MANAGEMENT

The approximate average age of the timber in the area is 70 years. The standing volume of the 4,931 acres of productive forest land is 45.8 million board feet which is .12% of the total federal regional standing volume. For the timber production capability of the area, refer to Table 3-2.

ECONOMICS

The primary counties which would be affected by any activities within this WSA are Benewah and Kootenai. Total 1980 employment in these counties was 18,190 with lumber related employment

accounting for 2,905. Total wages in the counties for that year were \$217,134,700 of which \$57,176,000 were lumber sector related (Idaho Department of Employment 1981). By 1984, lumber related employment had dropped to about 2300 jobs with \$45,700,000 paid in related wages.

An annual harvest of 314 million board feet of timber is necessary to maintain current (1984) levels of lumber related employment.

RECREATION

Roaded natural (20%), semi-primitive motorized (40%), and semi-primitive nonmotorized (40%) recreation settings are available within the unit. A high diversity of landscape elements exist in the entire area, as evidenced by the "A" class scenic quality rating.

The only special attraction in the area is Crystal Lake. There are no developed recreation facilities within the unit that would serve to attract use. The unit's ability to sustain semi-primitive opportunities is low due to the limited roads and trails in the area to disperse use and its small size. The WSA contains about 3 miles of trail. Current recreation use is estimated to be 3,575 visitor days annually, of which 75 are devoted to recreational ORV use. The majority of use (3,500 visitory days) is hiking, camping, sightseeing, hunting, fishing and berry picking.

SOILS

There are three major soil associations in the WSA. The Divers-Brickel Association makes up about 45 percent of the area. This is a deep, well-drained soil that occurs on 45 to 75 percent slopes. It has moderate permeability with low to very low water capacity. Surface runoff is very rapid and the erosion potential is very high.

The Huckleberry-Ardenvoir Association covers about 30 percent of the area and occurs on 35 to 60 percent slopes. This soil is moderately deep and well drained with moderate permeability. Surface runoff is rapid and its erosion potential is very high.

The Brickel-Rubble Land Association covers about 25 percent of the WSA. This association consists of shallow soils on ridge tops along with areas of stones and boulders. The soils have moderate permeability. The available water capacity is very low with rapid runoff. The erosion potential is very high.

WATER RESOURCES

The WSA contains the headwaters area of Latour Creek and adjoining areas of Pine Creek, Reeds Gulch, Ahrs Gulch, and Rochat Creek. Approximately 9.5 miles of stream are located within the WSA. Annual precipitation ranges from 40 to 60 inches with water yields of 20 to 30 inches.

Watershed conditions vary greatly in the unit due to the variety of topography and land treatments (both natural and man-made). The upper portion of the WSA was extensively damaged by the 1910 fire and has been slow to recover. The water quality of the unit is considered to be very good. A small portion (less than 50 acres) is included in the Rochat municipal watershed.

Being headwaters, the streams are very small except for Latour Creek, and stream stability is good. Latour Creek originates from Crystal Lake which is about 12 acres in size. At 3,500 feet the stream enters a meadow area. This area has a great deal of aggregation and stream migration caused by active beaver dams. The stream is less stable in this reach.

VEGETATION

Table 3-3 summarizes the vegetation for this unit. There are no known state-listed rare, or federally-listed threatened, or endangered plant species in the WSA.

TABLE 3-3
CRYSTAL LAKE VEGETATION

Habitat Type Series	Acres	Seral Tree Species	Primary brush, grasses, and forbs
Grand fir	2,570	Douglas-fir, western larch, ponderosa pine, lodgepole pine	pachistima, western meadowrue, Columbia brome
Subalpine fir	410	white pine, Englemann spruce	menziesia, pachistima, beargrass, honeysuckle
Mountain hemlock	4,757	white pine, subalpine fir, Englemann spruce	beargrass, menziesia, elk sedge, shodendron, honeysuckle
Douglas-fir	660	ponderosa pine, western larch	ninebark, oceanspray, ceanothus, bluegrass, aster
Western hemlock	630	white pine, western larch, grand fir	pachistima, blueberry, western meadowrue, Columbia brome

WILDLIFE

Major terrestrial wildlife species that occupy the WSA are elk, mule deer, songbirds, cavity (snag) dwellers, forest grouse, and small mammals. Bobcat, a sensitive species, may also occur in the area. No other sensitive, threatened, or endangered wildlife species are known to inhabit the area.

The WSA contains important elk summer range capable of supporting about 180 head and important deer summer range capable of supporting approximately 70 head. Areas designated as important range are necessary for the maintenance of viable populations. Approximately 12 fawning/calving and rutting areas have been found in the WSA. The roadless nature of the area makes it valuable for wildlife because of reduced human pressure.

Latour Creek, which originates at Crystal Lake, drains the unit. Both the creek and the lake are fish habitat. A 1977 inventory of Latour Creek found the stream to be habitat for brook trout, cutthroat trout, and sculpin. The stream's habitat condition is considered to be near-pristine.

Crystal Lake is planted with about 5,000 one-inch cutthroat trout on a biannual basis by Idaho Department of Fish and Game. The lake is in a near-pristine condition. Both Crystal Lake and Latour Creek are of local importance in terms of fishery habitat.

CULTURAL RESOURCES

Only a very limited Class III cultural resource inventory has been conducted on the WSA; however, nationally significant cultural resources are known to exist. The major cultural resource which has been identified is the Skitswish Monuments, a group of pits and rock structures used in

religious practices of the Coeur d'Alene Indian Tribe. These monuments have been determined to be eligible for nomination to the National Register of Historic Places.

Cultural activities which are known or speculated to have taken place in the WSA are plant collection, camp sites, mineral collection, and religious activities.

VISUAL RESOURCES

The visual resources inventory for this WSA indicates that it contains scenic values which are rated high when compared to other areas in northern Idaho.

GRANDMOTHER MOUNTAIN

INTRODUCTION

The Grandmother Mountain WSA (refer to Map 1-3) is located 12 miles east of Clarkia. The WSA contains a total of 17,129 acres of public land with 10,339 acres in unit 61-15a and 6,790 acres in unit 61-15b. These two units are separated by the USFS administered Marble Creek drainage. There are an additional 160 acres of private land and 160 acres of land administered by the Forest Service within 61-15b.

Area 61-15a is bordered by a combination of National Forest, private, and state lands. The Freezeout Saddle Road forms the southern boundary of this portion of the WSA. Area 61-15b is bordered by a more intermingled pattern of National Forest, private, and State lands on all sides. This intermingled pattern results in a narrow and irregular configuration.

The terrain within 61-15a varies from heavily forested drainages to bare peaks. There are numerous small drainages and several high mountain lakes located throughout. Elevation ranges from 6,800 feet on Widow Mountain to 4,600 feet in the Lund Creek drainage.

The terrain and vegetation of 61-15b is similar to that of 61-15a. This area, however, does not contain the variety of features found in 61-15a. In the Placer Creek drainage, elevation ranges from 4,800 feet to over 6,300 feet.

There are several hiking trails which cross both portions of the WSA. All are administered by the Forest Service or BLM.

WILDERNESS VALUES

During the wilderness inventory, the WSA was found to exhibit the wilderness characteristics of size, naturalness, solitude, and primitive recreation. It also contains special values of ecological interest. For an evaluation of these wilderness characteristics, please refer to Appendix 1.

ENERGY AND MINERAL RESOURCES

There are no known energy resources in the unit. In addition, no known mineral values for leasable minerals exist in the area. Subeconomic resources of aluminum in anorthosite have been identified, but the mineral is classified as a submarginal resource. The entire unit has identified undiscovered resources for garnet, asbestos, and refractories. There are no mining claims within the unit.

TIMBER MANAGEMENT

The approximate age of timber in the area is 120 years. The standing volume in the 12,244 acres

of productive forest land is approximately 157 million board feet which is .4% of the total federal regional standing volume. For the timber production capability of the area, refer to Table 3-2.

ECONOMICS

Shoshone County would be the county primarily affected by actions in this WSA. Total 1980 employment was 7,439 with lumber related employment accounting for 194. Lumber related wages were \$3,854,696 (Idaho Department of Employment 1981). Lumber related employment had dropped to about 155 by 1984 with corresponding wages reduced to \$3,079,783.

An annual timber harvest of 21 million board feet is necessary to maintain current levels of lumber related employment.

RECREATION RESOURCES

The WSA primarily provides a semi-primitive nonmotorized recreation opportunity setting (93% of the area). Roaded natural (3%) and semi-primitive motorized (4%) settings exist primarily around the roaded boundary on the southern portion of the unit. Although most of the trail systems within the WSA are suitable for motorized uses, they are presently little used for this activity (approximately 350 annual visitor days of recreational ORV use).

A high diversity of landscape elements exist in the area. Special features that attract recreation use include the extensive 12 miles of trail (9.8 miles of which are part of the Marble Creek National Trail) Fish Lake, Lost Lake, and Crater Lake.

Non-vehicle recreation use of the area is estimated to be 9,000 visitor days annually. This use includes hiking, camping, hunting, fishing, and sightseeing.

SOILS

There are three major soil associations within the WSA. The Huckleberry-Ardenvoir Association makes up about 10 percent of the area. The Divers-Brickel Association covers about 60 percent of the area, and the remaining 30 percent of the WSA is covered by the Brickel-Rubble Land Association. For a general description of these soils, refer to the previous soils discussion for the Crystal Lake unit.

WATER RESOURCES

The WSA is located along the major hydrologic divide of the Clearwater and Spokane River drainages and contains many headwater streams. There are about 62 miles of streams in this WSA. The annual precipitation averages about 50 inches per year and water yield ranges between 20 and 50 inches.

Stream conditions vary greatly in the unit. The watershed of the entire WSA is rated as good (stream banks are stable) with one exception. The rocky area below Lookout Mountain (approximately 200 acres) is rated as fair (some stream banks show indicators of instability).

The lands in the unit are hydrologically important because they are in very high water yield zones. The elevation of the area provides high stream flows for an extended period due to the large snowpack. Water quality is considered to be very good throughout the unit.

VEGETATION

Table 3-4 summarizes the vegetation of this WSA. There are no known state listed rare, or federally-listed threatened, or endangered plant species in the WSA.

TABLE 3-4
GRANDMOTHER MOUNTAIN VEGETATION

Habitat Type Series	Acres	Seral tree species	Primary brush, grasses, and forbs
Grand fir	1,220	Douglas-fir, western larch, ponderosa pine,	pachistima, western meadowrue, Columbia brome
Western red cedar	320	western white pine, western larch, grand fir	pachistima, blueberry, queencup beardslilly, Columbia brome
Subalpine fir	10,359	western white pine, Englemann spruce, lodgepole pine	menziesia, sitka alder, honeysuckle, pachistima, beargrass
Mountain hemlock	5,230	subalpine fir, white pine, Englemann spruce	beargrass, menziesia, elk sedge, honeysuckle, shodendron

WILDLIFE

Major terrestrial wildlife species that occupy the WSA include elk, mule deer, white-tailed deer, moose, black bear, songbirds, cavity dwellers, forest grouse, and small mammals. Wolverine and Canada lynx, both sensitive species, may also occur in the area. No other sensitive, threatened or endangered wildlife species are known to inhabit the area.

The entire WSA is classified as elk summer range capable of supporting about 340 head and important deer summer range capable of supporting approximately 130 head. Mule deer and black bear occupy the entire Grandmother unit. A small moose population (about 10 head) occasionally use the summer/fall range (about 1,000 acres) in the Little North Fork and Little Lost Lake drainages.

The roadless nature of the unit makes it valuable for wildlife because of reduced human intrusion. Despite the lack of detailed inventory data, BLM wildlife biologists believe that this WSA contains high quality habitat.

The WSA contains two lakes (32 acres total) and eight streams (48 miles) that support fisheries. Cutthroat, rainbow, and Dolly Varden trout and grayling inhabit these lakes and streams.

CULTURAL RESOURCES

Class III cultural inventories have been conducted on 3,300 acres (19%) of this WSA. Based on these inventories, professional archaeologists believe that temporary camp sites exist near the springs, lakes, and streams in this unit. Thick underbrush prohibits the determination of the precise location of these sites. Because of the distance of this unit from major rivers, it is not expected to contain a major settlement.

VISUAL RESOURCES

The visual resources inventory rates the scenic values of this WSA as high with 92% of the unit rated as A class scenery and 8% as B class.

SNOWHOLE RAPIDS

INTRODUCTION

The Snowhole Rapids WSA (refer to Map 1-4) is located 8 miles southwest of Cottonwood. The WSA contains 5,068 acres.

Private land forms the border around the majority of the unit. Approximately 2.5 miles of natural surface roads form small portions of the border at both ends of the WSA. The unit is approximately 20 miles in length but averages only 0.5 mile in width. Within this configuration, the Salmon River and the steep canyon walls which surround it are found. The majority of the unit is confined to these walls. Only at Mahoney Creek, approximately midway through the area, does the unit extend any appreciable distance from the river. At this point the boundary extends one mile south of the river. In contrast, the unit narrows to approximately 330 feet 1.5 miles downstream.

The canyon walls within the unit are steep and highly broken due to erosional forces. Numerous perennial and intermittent drainages further diversify the terrain. Elevation ranges from 3,800 feet in the Mahoney Creek drainage to 1,200 feet at the Salmon River.

The vegetation within the unit is more uniform in nature than the topography. Grasses dominate the landscape where adequate soil is present. However, scattered locations throughout the unit do support trees, shrubs, and herbaceous species. Most of these locations are along the drainages that flow into the Salmon River. The most extensively vegetated area is found in the Mahoney Creek drainage.

WILDERNESS VALUES

During the inventory, the WSA was found to exhibit the wilderness characteristics of size, naturalness, solitude, and primitive recreation. It also contains special values of ecological and historic interest. For an evaluation of these wilderness characteristics, refer to Appendix 1.

ENERGY AND MINERAL RESOURCES

There are no identified energy resources within the WSA and no known mineral values for locatable or leasable minerals. Saleable minerals in the area such as sand and gravel are found in terrace deposits in a few locations along the river. Due to limited access, these deposits are not currently economically significant.

Gold-bearing gravels are reported to occur along the Salmon River; however, the most productive deposits are many miles from the WSA.

There is no current production of locatable, leasable, or saleable minerals. There are no mining claims located within this unit. The lands within the Snowhole Rapids WSA are presently withdrawn from mineral appropriation until 1991 and a formal 20-year withdrawal is pending.

TIMBER MANAGEMENT

The standing volume of timber in the 286 acres of forest land is approximately 536,000 board feet

which is less than 1/10 of 1 percent of the total federal regional standing volume. For the timber production capability of the area, refer to Table 3-2.

ECONOMICS

Any impacts which would result from actions in this WSA would affect Lewis and Idaho counties. Total 1980 employment in these counties was 3,925. Commercial river guiding and outfitting operations comprise a small portion of this total.

RECREATION RESOURCES

The unit provides a semi-primitive nonmotorized recreation setting. Although powerboats do use the river, their contact with other floatboaters is currently infrequent or for a short period of time. The lower Salmon River provides nationally recognized whitewater rafting opportunities. Based upon a percentage of the WSA area to the total river corridor, recreation use within the WSA is currently estimated at 8,500 annual user days. Recreation activities associated with river running include fishing, camping, hiking, hunting, and sightseeing. There are no facilities in the WSA.

SOILS

There are two major soil associations within the WSA. The Bluesprin-Rock Outcrop Association covers about 80 percent of the unit. This is a moderately deep and well drained soil that occurs on 40 to 90 percent slopes. The soil has moderately low permeability and low water capacity. Runoff is very rapid. The hazard of erosion is very high.

The Bluesprin-Klickson-Rock Outcrop Association covers about 20 percent of the unit. This association is also moderately deep and well drained with 40 to 90 percent slopes. It has moderate permeability and moderate water capacity. Runoff is very rapid and the erosion hazard is very high.

WATER RESOURCES

The Salmon River flows through this entire WSA (20 miles). The steep canyon walls in the unit limit watershed capability but watershed conditions are generally stable. The streams emptying into the Salmon River have a stability rating of fair to good. The larger streams with a more moderate gradient have the better stream stability ratings. The water quality in the streams sampled has been found to be relatively good. The water quality of the Salmon River is considered to be good and has not changed for several years.

The canyon area has a mean annual precipitation of 10 to 15 inches. The average annual water yield is very low (5 inches or less) although occasionally heavy rains can result in a very high yield due to the steep topography.

VEGETATION

The high variability in soils, slope, aspect, and past use has resulted in a mosaic of plant communities within the study area. The vegetation is composed almost entirely of grasslands.

Timbered sites occupy only 286 acres in the Snowhole Rapids unit. The grass lands are comprised of three habitat types: Idaho Fescue/Bluebunch Wheatgrass, Bluebunch Wheatgrass/Sandberg Bluegrass, and Bluebunch Wheatgrass/Plains Pricklypear.

The timbered areas are classified as a Douglas-fir/Ninebark habitat type. This type is found in

pockets on north and east facing slopes with moderate to well developed soils. Douglas-fir and ponderosa pine form the upper canopy layer with ninebark dominating the understory vegetation. Grasses and forbs increase where openings in the timber canopy occur.

There are no known state-listed rare, or federally-listed threatened, or endangered plant species in the WSA.

WILDLIFE

Mule deer are the dominate big game species in the area. About 250 deer use the area as part of their winter/spring range. About 100 deer use the area for part of their summer/fall range. White-tailed deer totaling about 125 head winter near Wickiup Creek.

The chukar partridge is the most abundant upland game species and has a preferred habitat of canyon grasslands. Other upland species include Hungarian partridge, grouse, mourning doves, mountain quail, and valley quail.

Bald Eagles (an endangered species) may winter in the area, but the habitat is not good due to a natural scarcity of food. No other sensitive, threatened or endangered wildlife species are known to inhabit the area.

Six sensitive species occur in the area — Columbia tiger beetle, bobcat, osprey, mountain quail, river otter, and white sturgeon. Tiger beetles were once thought to be extinct due to dam construction which flooded their known range downstream. Their preferred habitat is sand bars along the river. Bobcats and otters are common in the area; osprey and mountain quail are not.

One river and two creeks in the unit have fisheries value — the Salmon River, Telcher Creek, and Burnt Creek. The Salmon River is affected only in a very minor way by BLM management activities in the Snowhole area. Telcher and Burnt Creeks are of marginal value for fish production due to their steep gradients and low water flows which limit spawning habitat.

CULTURAL RESOURCES

The lower Salmon River, including the WSA, contains abundant evidence of prehistoric and historic activity. The earliest evidence of occupation dates back to the Windust phase (9,000 B.C. to 6,000 B.C.) for the general Salmon-Snake River area. Until approximately 2,500 B.C. there were no permanent villages established along the river, so habitation is characterized by evidence of small, temporary camps. Early inhabitants were dependent upon salmon runs, a lifestyle that continued through 1800 A.D. The river was heavily utilized by miners in the 1880s to early 1900s. Evidence of their activity is still visible at many points along the river corridor.

There are many prehistoric and historic sites of National Register quality along the river. The river corridor is being considered for nomination as an Historic District on the National Register of Historic Places.

VISUAL RESOURCES

The visual resources inventory for this WSA indicates that it contains scenic values which are rated high when compared to other areas in northern Idaho.

MARSHALL MOUNTAIN

INTRODUCTION

The Marshall Mountain WSA (refer to Map 1-5) is located 22 miles east of Riggins. The WSA origi-
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nally contained 6,524 acres of public land, but approximately 720 acres of the WSA have been designated as wilderness as part of the Frank Church River of No Return Wilderness Area.

The Payette National Forest forms the boundary along the north and east side of the WSA. Natural surface roads, an Idaho State section, and other parcels of public land form the remaining borders. This intermingled pattern results in the WSA's narrow and irregular configuration.

The topography of the area is mountainous and frequently broken by perennial and intermittent drainages. The land is heavily covered by a mixed-conifer forest. This forest cover is occasionally broken by talus slopes and rock outcrops. Elevation ranges from over 8,400 feet at the summit of Marshall Mountain to 3,600 feet in Long Tom Creek.

WILDERNESS VALUES

During the wilderness inventory, the unit was found to exhibit the wilderness characteristics of size, naturalness, solitude, and primitive recreation. For an evaluation of these wilderness characteristics, refer to Appendix 1.

ENERGY AND MINERAL RESOURCES

A 1977 USGS map titled "Land Valuable for Geothermal Resources" indicates this area may be valuable for geothermal resources. The Department of Energy's "Energy-Resource Evaluation of Wilderness Study Areas" (USDOE 1981) mentions that numerous hot springs occur in the vicinity of the WSA with temperatures ranging from 30°C to 60°C. In order to use low-temperature thermal waters (less than 90°C) they must be available from a spring or a shallow well, neither of which exist within the WSA. There are no known mineral values for either leasable or saleable minerals.

The area has been classified as having identified undiscovered resources for base metals, gold, and silver. There are over 15 mine sites within 10 miles of the WSA.

There are no leases or pending applications for leasable minerals. According to BLM's mining claim records there are approximately 150 lode mining claims within the unit. There are no permits or pending applications for saleable minerals.

TIMBER MANAGEMENT

The average age of timber in the area is 95 years. The standing volume on the 3,920 acres of productive forest land is estimated at 57 million board feet which is .15% of the total federal regional standing volume. For the timber production capability of the area, refer to Table 3-2.

ECONOMICS

The primary county of impact related to this WSA would be Idaho County. Total 1980 employment was 3,086 with the lumber industry accounting for 969. Wages in the county totalled \$38,155,400 with \$17,635,400 related to the lumber industry (Idaho Department of Employment 1981). By 1984 lumber related employment had dropped to approximately 775 with corresponding wages reduced to \$14,108,320.

A total annual timber harvest of 105 million board feet would be necessary to maintain current levels of lumber industry related employment.

RECREATION RESOURCES

The unit primarily provides semi-primitive motorized recreation opportunity settings.

Specific recreation attractions in the area include the various historic mining structures and mountain lakes. There are no developed recreation facilities or established trails to attract use. Existing use is estimated to be about 110 user days per year. Of this total, about 10 annual visitor days involve recreational ORV use with the balance devoted to hunting, fishing, hiking, camping, and sightseeing. Much of the recreation that occurs is in conjunction with use of adjacent lands.

SOILS

There are two major soil associations within the WSA. The Jughandle-Suttler Association covers about 70 percent of the unit. It is a deep and excessively drained soil with moderately rapid permeability. The available water capacity is moderate. Runoff is very rapid, and the erosion hazard is very high.

The Nazaton-Suttler Association covers about 30 percent of the unit. The soil is very deep and well-drained with a moderate water capacity. Runoff is very rapid and the erosion hazard is very high.

WATER RESOURCES

All streams in the unit eventually flow through the River of No Return Wilderness and drain into the Salmon River, a designated Wild and Scenic River system component. There are about 12 miles of streams in the WSA. The mean annual precipitation is about 27 inches per year with a water yield averaging about 10 inches. The watershed condition of the WSA is stable. Water quality in the unit is considered to be good.

VEGETATION

Table 3-5 summarizes the vegetation in the Marshall Mountain WSA. No state-listed rare, or federally-listed threatened, or endangered plant species have been identified in the unit.

TABLE 3-5
MARSHALL MOUNTAIN WSA VEGETATION

Habitat Type Series	Acres	Seral Tree Species	Primary Brush, Grasses, Forbes
Douglas-fir	414	ponderosa pine, western larch	ninebark, oceanspray, bluegrass, ceanothus
Grand fir	1,400	Douglas-fir, ponderosa pine, western larch	western meadowrue, Columbia brome, sweet scented bedstraw
Subalpine fir	3,990	white pine, Englemann spruce	beargrass, menziesia, elk sedge, shodendron

WILDLIFE

Elk and mule deer use of the area is light. An estimated total of 40 elk and 60 deer occasionally

use the area as summer and fall habitat. The unit provides black bear habitat, but numbers are not known.

Both spruce and blue grouse are found in the conifer habitats.

No endangered or threatened wildlife species are known to occur in the area. Sensitive species including wolverine, Canada lynx and bobcat may use the unit as part of their habitat.

The primary fish habitat values in the Marshall Mountain area are associated with the lakes. Upper Twin Lake (4 acres) has no potential for natural spawning, but contains suitable unoccupied trout habitat. Lower Twin Lake (3 acres) does not contain spawning habitat but is stocked with rainbow trout. Debbie Lake (4 acres) also contains rainbow trout.

Because of the lack of natural spawning potential in the lakes, fish populations would experience a downward trend without supplemental fish planting. Because of high gradient and migration barriers, the streams in the area do not provide fish habitat.

CULTURAL RESOURCES

This unit has not been included in a Class III cultural resource inventory. Some limited inventories have been conducted in the adjoining areas and cultural resources are known to be present on the edges of the unit.

The known cultural resources in the Marshall Mountain area are related to historic prospecting and mining operations. At the present time, very little is known about the prehistoric utilization of the unit.

VISUAL RESOURCES

According to the visual resources inventory, the scenic quality of this WSA is high with most of the unit rated as Class A scenery.

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This chapter describes and analyzes the probable environmental impacts of the alternatives including the proposed action. The analysis is designed to be commensurate with the expected magnitude, intensity, duration, and incidence of impacts. The quantification of impacts resulting from timber management activities is based on historic averages and accepted methodologies. Supplemental information regarding the impacts resulting from timber management practices, including associated road construction, is available in the North Idaho Timber Management EIS (BLM 1981).

This chapter also portrays the relationship between the short-term use of man's environment and long-term productivity and identifies any irreversible or irretrievable commitments of resources involved in implementing the alternatives. A comparative summary of impacts is presented in Table 2-6 in Chapter 2.

The impact topics analyzed in this chapter were derived from the environmental issues described in Chapter 1. Not all the issues/topics relate to every WSA.

SELKIRK CREST WSA (Unit 61-1)

Alternative SC-1, All Wilderness

Impacts on Wilderness Values (the only issue pertinent to this WSA)

Under this alternative, this small (720 acres), isolated tract of land would be preserved as wilderness. The area has outstanding solitude values only in conjunction with the adjacent 43,500 acres of Forest Service lands which have not been recommended for wilderness designation.

Alternative SC-2, No Action/No Wilderness (Proposed Action)

Impacts on Wilderness Values

Under this alternative, the WSA would be recommended as nonsuitable for wilderness designation. There is presently no impact to wilderness values. This small tract is essentially natural and contains solitude values which are interrupted by only 8 to 10 recreational ORV users per year. It is projected that this level of use will remain constant and no additional impacts to wilderness values are expected over the long term.

CRYSTAL LAKE WSA (Unit 61-10)

Alternative CL-1, All Wilderness

Under this alternative, the entire WSA (9,027 acres) would be recommended as suitable for wilderness designation.

The primary impacts from this alternative relate to the prohibition of timber harvest and ORV use in the WSA.

Management actions would be limited to those permitted by the Bureau's wilderness management policy. Timber harvest and such supporting activities as road construction and maintenance,

ground based and cable yarding, slash disposal and debris burning would not occur. In the absence of ORV and timber harvest activities, there would be no impacts to soil, water quality, water supply, fish, vegetation, mammals and birds, archaeological resources, and scenic quality.

Conclusion

Since soil disturbing activities would not occur, there would be no impact to the above mentioned impact topics.

Impacts on Wilderness Values

Under the Alternative CL-1, All Wilderness, all 9,027 acres of the WSA would be recommended as suitable for wilderness designation and all wilderness values would be protected by legislative mandate. There are no mining claims located within the WSA and wilderness designation would withdraw the WSA from mineral entry.

The estimated 75 visitor days of ORV use in the Crystal Lake WSA would be foregone annually by wilderness designation. Although encounters between ORV users and others are infrequent at the current use levels, the elimination of ORV use would enhance opportunities for solitude. The effects on the area's naturalness as a result of ORV closure would be negligible since the existing level of use is quite low.

Livestock grazing and range management actions would not affect wilderness values in the WSA because no new range developments are planned in the WSA and maintenance activities would not change.

Conclusion

Wilderness values would be maintained on the entire Crystal Lake WSA.

Impacts on Development of Mineral Resources

Wilderness designation would withdraw all 9,027 acres of public land from all forms of mineral entry and mineral leasing, subject to valid rights existing at the time of designation. Although there are no mining claims or leases within the WSA and the potential for any development is negligible, the opportunity to explore and develop mineral resources would be foregone under wilderness designation.

Conclusion

Opportunities to explore and develop mineral resources would be foregone.

Impacts on Timber Industry and Local Economy

Wilderness designation would prohibit intensive timber management activities, including timber harvest and road building, on the entire WSA. This would eliminate a potential annual harvest of 830 MBF of timber. This volume of timber harvest would represent about .2 percent of the annual

harvest from federal forest lands within the EIS study area. By not permitting intensive timber management in this WSA, this alternative would eliminate a potential increase of 6 lumber-related jobs in the local area. Six jobs represent .03 percent of the total employment in Benewah and Kootenai Counties.

Conclusion

A potential annual harvest of 830 MBF of timber and a corresponding potential increase if 6 lumber-related jobs would be foregone under this alternative. These potential economic gains would be insignificant to the economies of the two counties or the region.

Impacts on Recreational Off-Road Vehicle Use

Wilderness designation would close the entire 9,027-acre Crystal Lake WSA to all forms of recreational ORV use. Recreational ORV use of approximately 75 visitor days would be eliminated annually from the WSA. Public land that offers similar or superior opportunities for recreational ORV use is located throughout the region. Therefore, recreational ORV use foregone in the WSA would be absorbed on surrounding public lands.

Conclusion

Recreational ORV use of 75 visitor days would be foregone annually. The impacts of shifting this use to other public lands would be negligible.

Alternative CL-2, No Action/No Wilderness

Under this alternative, the entire WSA (9,027 acres) would be recommended as nonsuitable for wilderness designation. Intensive timber management would be the primary goal of management activities for this alternative.

The primary impacts from this alternative relate to the effects of timber management, including road building, on wilderness values.

Impacts on Wilderness Values

Since the entire WSA would be recommended as nonsuitable for wilderness designation under this alternative, wilderness values would not be specifically protected through legislation.

Intensive timber management prescribed for 4,931 acres in this WSA over a ten-year period would involve the harvest of 976 acres, the construction of 9.8 miles of road, slash disposal and site preparation through burning on 440 acres, planting on 140 acres, and the fertilization of 150 acres. These activities would result in the removal of vegetation, the presence of new roads and subsequent increased public access, and the introduction of the sights and sounds of man and machinery. As a consequence, the wilderness values for naturalness, solitude, and opportunities for primitive and unconfined recreation would eventually (within two decades) be eliminated on 4,931 acres due to the adverse impacts resulting from the gradual encroachment of timber management activities. During the same time frame, the remainder of the Crystal Lake WSA would retain its wilderness values, although the sights and sounds of timber management activities would lessen the feelings of naturalness and solitude.

The WSA would be open for ORV use and such use would affect wilderness values. Recreational ORV use levels are approximately 75 visitor days annually and this use is not expected to increase substantially during or beyond the planning cycle. The three miles of existing trail and the 9.8 miles of new road associated with timber management would be available for recreational ORV use. This network of trails and roads would tend to concentrate ORV use within the 4,931 acres of this WSA slated for intensive timber management actions. Recreational ORV use, while of a small magnitude in this WSA, would contribute to those causal agents that would eliminate the wilderness values of naturalness, solitude, and primitive recreation on 4,931 acres. ORV use would not substantially effect wilderness values on the rest of the WSA although the distant sounds of motorized vehicles would lessen one's perception of solitude and naturalness.

Although the WSA would be open for mineral entry, no mining claims or leases currently exist and no mineral development is anticipated during or beyond the current planning cycle.

Conclusion

The wilderness values of naturalness, solitude, and primitive and unconfined recreation, would be totally eliminated on 4,931 acres of this WSA due to the adverse effects resulting from timber management activities and recreational ORV use. The values of naturalness and solitude would be adversely affected on the remainder of the WSA by the sights and sounds of man and machinery on the adjacent lands.

Impacts on Development of Mineral Resources

All lands within the WSA (9,027 acres) would remain open for mineral entry and mineral leasing. Mineral resources would be available for development. There would be no impact to development of mineral resources.

Conclusion

Potential mineral resources would be available for development. There would be no impact to development of mineral resources.

Impacts on Timber Industry and Local Economy

This alternative would emphasize the management of the WSA for timber values. The 4,931 acres of productive forest land would support an annual harvest of 830 MBF of timber. This volume is small in a regional context (approximately .2 percent of harvest from regional federal lands) but would support an estimated 6 lumber-related jobs. The wages corresponding to this potential increase in employment (\$118,000 annually) would contribute slightly to the local economies of Kootenai and Benewah Counties. This potential increase would represent about .05 percent of current wages for these counties.

Conclusion

There would be slight beneficial impacts to the timber industry and local economies resulting from the intensive timber management prescribed by this alternative.

Impacts on Recreational Off-Road Vehicle Use

This alternative would provide an additional 9.8 miles of road suitable for ORV use; however, recreational ORV use is not expected to exceed current levels (75 visitor days annually). Recreational ORV users would benefit from increased opportunities to travel through more of the unit, thereby dispersing use away from the current three-mile stretch of trail.

Conclusion

ORV users would benefit slightly from the additional use opportunities afforded by this alternative.

Impacts on Soil

Under this alternative 4,931 acres would be intensively managed for timber production. The primary impacts to the soils resource resulting from timber harvest practices and associated road construction are soil erosion and compaction.

The estimated erosion rate for undisturbed land in the Coeur d'Alene District is .033 tons per acre per year (21 tons per square mile per year). Construction of logging roads would increase erosion 220 times (Megahan 1972) to 7 tons per acre per year. This rate would diminish to the approximate rate for undisturbed land in 4 years. Based on these findings, the construction of 9.8 miles of new roads would result in the displacement of approximately 800 tons of soil over a ten-year period. An additional 50 tons of soil would be lost as a result of yarding on 976 acres and disposal of slash and site preparation on 440 acres.

The total soil displacement (850 tons/decade) resulting from the timber management actions prescribed by this alternative would be minute (.2%) when compared to current displacement totals (410,000 tons/decade) for all BLM lands within the EIS area.

Heavy equipment operation would result in the compaction of soil on about 68 acres. This would change the soil structure of the well developed surface layers causing reduced soil productivity. Compacted soils would be loosened to some degree by frost heaving. It is estimated that compacted soils would recover in a period of 10 to 20 years.

The very limited recreational ORV use anticipated under this alternative would not measurably affect soil displacement or compaction.

Conclusion

The timber management activities prescribed by this alternative would increase soil displacement by .2% over current levels. Impacts to soils would be negligible.

Impacts on Water Quality

The primary impact of intensive timber management practices on water quality would be increased sediment yield (soil reaching a water channel) due to land disturbances. Increased sedimentation results in turbidity. It also has adverse effects on fisheries and other water related resources. Other water quality impacts such as changes in nutrient and chemical constituents are caused by vegetation changes, burning, and introduction of fertilizers.

Increased sedimentation would result from surface erosion caused by road construction, yarding, slash disposal, and mechanical scarification. Roads are the major source of soil erosion and subsequent sedimentation in forested areas. Implementation of this alternative would cause the displacement of 850 tons of soil over a 10-year period resulting in a sediment yield increase of approximately 576 tons (reaching streams and rivers) over the same period. This sediment yield increase is .4% of current sediment yields reaching water courses in the EIS area.

Road construction, timber harvest, yarding, site preparation, and slash disposal would affect the quality of runoff water through increased erosion and leaching of nutrients and chemicals from the exposed soils and plant residues. Burning of plant residue would accelerate the introduction of nutrients and chemicals by changing the form of the residual material. Fertilization could indirectly introduce nutrients and chemicals into water courses.

Vehicle use could create additional water quality impacts by causing soil erosion and compaction with a corresponding increase in surface runoff. These impacts are currently minor and are expected to remain so.

Conclusion

The slight increase in sediment yields resulting from soils reaching streams and rivers would have a negligible adverse impact on regional water quality. Likewise, increased nutrient and chemical levels would have a negligible (probably not measurable) adverse impact on water quality.

Impacts on Water Supply

Approximately 50 acres of this WSA is included in the Rochat municipal watershed. This small portion of the WSA is outside the area where intensive timber management activities would occur and is in an area which would not be affected by soil erosion and subsequent sedimentation. Therefore, there would be no impacts to water supply.

Conclusion

There would be no impacts to water supply.

Impacts on Fish

Water yield and sediment yield increases are the primary causal agents which result in impacts to fish.

Water yield would increase from those lands disturbed by road construction, timber harvest, yarding, and slash disposal and would be reduced by fertilization and planting. Increases in water yield decrease exponentially with time, and the rates vary by habitat types. Under this alternative, water yield would increase an estimated 25 acre feet per year. This would result in a slight increase in stream flow and subsequent scouring of channel bottoms in headwater streams, of which Latour Creek is one. The increase in stream flow resulting from the anticipated water yield increase is .03 cubic feet per second. This is well below the threshold (.56 cfs increase) where adverse impacts to fish and their habitat become significant in this area (NITMEIS 1981).

Fine sediment delivered to Latour Creek (the only stream in the unit which is a fishery) is

detrimental to fish and their habitat. Suspended sediments cause structural damage to fish gills and bottom sediments adversely impact fish habitat by covering rearing pools, suffocating embryos, and reducing the abundance of aquatic insects needed for food.

Of the 576 tons of sediment yield increase that would result from soil disturbing activities in this WSA, only a very small portion (estimated to be less than 65 tons over a decade) would enter the fish habitat reaches of Latour Creek. This amount of sediment yield increase would not reduce fish populations or substantially alter fish habitat.

Crystal Lake, which is stocked with cutthroat trout would not be adversely affected by sediment yield increases due to its geographic location.

Conclusion

Increased water yields and increased sediment yields resulting from intensive timber management would not cause measurable impacts to fish and their habitat.

Impacts on Vegetation

Intensive timber management activities which would occur under this alternative over a ten-year period would alter vegetation by eliminating biological productivity on the running surface of new and maintained roads (46 acres), damaging and/or destroying vegetation through yarding (100 acres), and modifying natural plant succession on the 976 acres to be harvested.

Of these impacts, the modification of plant community succession is the most important. The removal of trees creates openings in the forest canopy, allowing more light to penetrate to lower forest vegetation. Timber harvesting initiates secondary plant succession similar to that caused by natural disturbances. Modifications of plant communities would favor certain plant species over others and, as a consequence, favor certain bird and mammal species over others by changing their habitats.

In the context of the region, and the local area context for that matter, the impacts to vegetation would be insignificant.

Conclusion

The impacts of vegetation (destruction of plants and disruption of natural plant community succession) resulting from this alternative would be inconsequential. Changes in plant community structure/composition would alter wildlife habitats.

Impacts on Mammals and Birds

The primary impact to elk and deer caused by road construction and subsequent use and vegetative modification from timber harvest would be habitat modification and subsequent changes in populations.

Currently elk habitat within the Crystal Lake WSA is capable of supporting 180 head. During the planning cycle, modifications to elk habitat would reduce this capability to 168 head. Likewise, mule deer habitat currently capable of supporting 70 head would only support 67 head. These

estimates are based upon the findings of the Northern Idaho Interagency Habitat Task Force (1977). Long-term impacts (beyond the planning cycle) to elk and deer resulting from habitat modification and stress from increased human presence cannot be quantified. However, based on the analysis presented in the North Idaho Timber Management EIS (BIM 1981), only minor changes are anticipated. These changes could be beneficial or adverse to elk and deer depending on future harvest levels, climatic conditions, and future activities on neighboring habitat not managed by BIM.

Other mammals and birds (bobcat, songbirds, cavity-dependent species, and forest grouse) could be displaced by habitat modification and/or removal; however, adequate habitat exists within or immediately adjacent to the WSA to absorb these displaced mammals and birds with no measurable changes in populations anticipated.

Conclusion

During the planning cycle, habitat modification and increased human pressure would reduce elk and deer habitat capacity by 6.8% and 4%, respectively. This would be a negligible reduction in the WSA and local area. In the long-term (beyond the planning cycle) only minor changes are anticipated, the degree of which is unknown at this time. Impacts to birds and other mammals, including the bobcat (sensitive species), are also predicted to be negligible.

Impacts on Archaeological Resources

The only major archaeological resource in this WSA is the Skitswish Monuments which were discussed in Chapter 3. These monuments are eligible for nomination to the National Register of Historic Places. They are located in a non-forested portion of this WSA where no ground-disturbing activities are prescribed or would be allowed under this alternative. In addition, the isolated location of these monuments and their physical characteristics (large stone piles) makes any disturbance of them very unlikely. Therefore, no impacts would occur.

Conclusion

There would be no impact on archaeological resources.

Impacts on Scenic Quality

Scenic quality would be adversely affected on the 4,931 acres of productive forest lands slated for intensive timber management due to landform and vegetation modifications. These impacts would not exceed the visual resource management thresholds established for lands allocated to intensive timber management.

Conclusion

Scenic quality would be adversely affected through implementation of this alternative, but not beyond established visual quality thresholds.

Alternative CL-3, Outstanding Natural Area (ONA)(Proposed Action)

Under this alternative, the entire WSA (9,027 acres) would be recommended as nonsuitable for wilderness designation. The entire WSA would be designated and managed as an ONA to preserve its unusual natural characteristics. No ground-disturbing actions would be prescribed or are anticipated under this alternative.

The primary impacts from this alternative relate to the prohibition of timber harvest and ORV use in the WSA.

For this alternative, management actions would be limited to those permissible under the Outstanding Natural Area Management Plan. Timber harvest and such supporting activities as road construction and maintenance, ground based and cable yarding, slash disposal and debris burning would not occur. In the absence of ORV and timber harvest activities, there would be no impacts to soil, water quality, water supply, fish, vegetation, mammals and birds, archaeological resources, and scenic quality.

Conclusion

Since soil disturbing activities would not occur, there would be no impact to the above mentioned impact topics.

Impacts on Wilderness Values

The entire WSA would be recommended as nonsuitable for wilderness designation and wilderness values would not be legislatively protected. However, the proposed Outstanding Natural Area designation would provide administrative protection for wilderness values.

There are no mining claims located within the WSA and although the unit would be open to entry, its low mineral potential makes the likelihood of mineral development during and beyond the planning cycle extremely doubtful.

The estimated 75 visitor days of ORV use in the Crystal Lake WSA would be foregone annually by ONA designation. Although encounters between ORV users and others are infrequent at the current use levels, the elimination of ORV use would enhance opportunities for solitude. The effects on the area's naturalness as a result of ORV closure would be negligible since the existing level of use is quite low.

Livestock grazing and range management actions would not affect wilderness values in the WSA because no new range developments are planned in the WSA and maintenance activities would not change.

Conclusion

Wilderness values would be maintained on the entire Crystal Lake WSA.

Impacts on Development of Mineral Resources

All lands within the WSA (9,027 acres) would remain open for mineral entry and mineral

leasing. Although the potential for development is low, mineral resources would be available for development. There would be no impact to the development of mineral resources.

Conclusion

Potential mineral resources would be available for development. There would be no impact to development of mineral resources.

Impacts on Timber Industry and Local Economy

Outstanding Natural Area designation would prohibit intensive timber management activities, including timber harvest and road building, on the entire WSA. This would eliminate a potential annual harvest of 830 MBF of timber. This volume of timber harvest would represent about .2 percent of the annual harvest from federal forest lands within the EIS study area. By not permitting intensive timber management in this WSA, this alternative would eliminate a potential increase of 6 lumber-related jobs in the local area. Six jobs represent .03 percent of the total employment in Benewah and Kootenai Counties.

Conclusion

A potential annual harvest of 830 MBF of timber and a corresponding potential increase of 6 lumber-related jobs would be foregone under this alternative. These potential economic gains would be insignificant to the economies of the two counties or the region.

Impacts of Recreational Off-Road Vehicle Use

ONA designation would close the entire 9,027-acre Crystal Lake WSA to all forms of recreational ORV use. Recreational ORV use of approximately 75 visitor days would be eliminated annually from the WSA. Public land that offers similar or superior opportunities for recreational ORV use is located throughout the region. Therefore, recreational ORV use foregone in the WSA would be absorbed on surrounding public lands.

Conclusion

Recreational ORV use of 75 visitor days would be foregone annually. The impacts of shifting this use to other public lands would be negligible.

GRANDMOTHER MOUNTAIN WSA (Unit 61-15)

Alternative GM-1, All Wilderness

Under the All Wilderness Alternative, all 17,129 acres of public land in the Grandmother Mountain WSA would be recommended as suitable for wilderness designation.

The primary impacts from this alternative relate to the prohibition of timber harvest and ORV use in the WSA.

Management actions would be limited to those permitted by the Bureau's wilderness management policy. Timber harvest and such supporting activities as road construction and maintenance, ground based and cable yarding, slash disposal and debris burning would not occur. In the absence of ORV and timber harvest activities, there would be no impacts to soil, water quality, water supply, fish, vegetation, mammals and birds, archaeological resources, and scenic quality.

Conclusion

Since soil disturbing activities would not occur, there would be no impact to the above mentioned impact topics.

Impacts on Wilderness Values

Under the All Wilderness Alternative, all 17,129 acres of this WSA would be recommended as suitable for wilderness designation and all wilderness values would be protected by legislative mandate. There are no mining claims located within the WSA and wilderness designation would withdraw the WSA from mineral entry.

The estimated 350 visitor days of ORV use in the Grandmother Mountain WSA would be foregone annually by ONA designation. While encounters between ORV users and others are infrequent at the current use levels, the elimination of ORV use would enhance opportunities for solitude. The effects on the area's naturalness as a result of ORV closure would be negligible since the existing level of use is quite low and use is dispersed over a large area.

Conclusion

Wilderness values would be maintained on the entire Grandmother Mountain WSA.

Impacts on Development of Mineral Resources

Wilderness designation would withdraw all 17,129 acres of public land from all forms of mineral entry and mineral leasing, subject to valid rights existing at the time of designation. Although there are no mining claims or leases within the WSA and the potential for any development is negligible, the opportunity to explore and develop mineral resources would be foregone under wilderness designation.

Conclusion

Opportunities to explore and develop mineral resources would be foregone.

Impacts on Timber Industry and Local Economy

Wilderness designation would prohibit intensive timber management activities, including timber harvest and road building, on the entire WSA. This would eliminate a potential annual harvest of 2,100 MBF of timber. This volume of timber harvest would represent about .4 percent of the annual harvest from federal forest lands within the EIS study area. By not permitting intensive timber management in this WSA, this alternative would eliminate a potential increase of 15 lumber-related

jobs in the local area. Fifteen jobs represent .2 percent of the total employment in Shoshone County, the area which would be primarily affected by actions in this WSA.

Conclusion

A potential annual harvest of 2,100 MBF of timber and a corresponding potential increase of 15 lumber-related jobs would be foregone under this alternative. These potential economic gains would be insignificant to the economies of the local area or the region.

Impacts of Recreational Off-Road Vehicle Use

Wilderness designation would close the entire 17,129-acre Grandmother Mountain WSA to all forms of recreational ORV use. Recreational ORV use of approximately 350 visitor days would be eliminated annually from the WSA. Public land that offers similar opportunities for recreational ORV use is located throughout the region. Therefore, recreational ORV use foregone in the WSA would be absorbed on surrounding public lands.

Conclusion

Recreational ORV use of 350 visitor days would be foregone annually. The impacts of shifting this use to other public lands would be negligible.

Alternative GM-2, No Action/No Wilderness

Under this alternative, the entire WSA (17,129 acres) would be recommended as nonsuitable for wilderness designation. No intensive timber management activities would occur; however, the entire WSA would remain open for recreational ORV use and mineral entry. No livestock grazing occurs and no range development actions are anticipated.

The primary impacts from this alternative relate to the continued lack of timber management activities and the impacts of ORV use on wilderness values.

Under this alternative, timber harvest and such supporting activities as road construction and maintenance, ground based and cable yarding, slash disposal and debris burning would not occur. No mineral development has or is likely to occur in this WSA and ORV use is restricted to maintained trails by the vegetative and topographic features of the unit. Due to these factors there would be no impacts to soil, water quality, water supply, fish, vegetation, mammals and birds, archaeological resources, and scenic quality.

Conclusion

Since soil disturbing activities would not occur, there would be no impact to the above mentioned impact topics.

Impacts on Wilderness Values

Since the entire WSA would be recommended as nonsuitable for wilderness designation under this alternative, wilderness values would not be specifically protected through legislation.

The WSA would be open for ORV use and such use would affect wilderness values. Recreational ORV use levels are approximately 350 visitor days annually and this use is not expected to increase substantially during or beyond the planning cycle. The vegetative and topographic features of this WSA primarily restricts ORV use to the 12 miles of existing, maintained trails. Recreational ORV use, while of a small magnitude in this WSA, would adversely affect the wilderness values of naturalness and solitude throughout the WSA since the trail network traverses the WSA and sights and sounds of man and machinery could be perceived throughout the majority of the area.

Although the WSA would be open for mineral entry, no mining claims or leases currently exist and no mineral development is anticipated in the foreseeable future.

Conclusion

The wilderness values of naturalness, solitude would be adversely affected in the majority of the Grandmother Mountain WSA by recreational ORV use.

Impacts on Development of Mineral Resources

All lands within the WSA (17,129 acres) would remain open for mineral entry and mineral leasing. While the potential for mineral development is very low, the mineral resources of the WSA would be available for development.

Conclusion

There would be no impact on the development of mineral resources from implementation of this alternative.

Impacts on Timber Industry and Local Economy

This alternative would foresee no intensive timber management activities, including timber harvest and road building, within the WSA. The potential annual harvest of 2,100 MBF of timber would remain uncut. This volume of timber harvest would represent about .4 percent of the annual harvest from federal forest lands within the EIS study area. By not providing for intensive timber management in this WSA, this alternative would extend the present condition of not providing new local logging employment for up to 15 people. Fifteen jobs represent .2 percent of the total employment in Shoshone County, the area which would be primarily affected by continuation of present management in this WSA.

Conclusion

This alternative would extend the present condition of not harvesting 2100 MBF of timber or providing 15 new lumber-related jobs. These potential economic gains would be insignificant to the economies of the local area or the region.

Impacts on Recreational Off-Road vehicle Use

This alternative would permit recreational ORV use on the entire WSA. Current use levels of approximately 350 annual visitor days would not increase substantially in the foreseeable future. Periodic maintenance of the existing trail network would benefit ORV users by keeping the trail network intact. Keeping the trail network intact would focus ORV use to those areas where environmental degradation (with the exception of adverse impacts on naturalness and solitude) would not occur.

Conclusion

This alternative would result in beneficial impacts to ORV use by continuing periodic maintenance of the 12-mile trail network.

Alternative GM-3, Timber Emphasis

Under this alternative, the entire WSA (17,129 acres) would be recommended as nonsuitable for wilderness designation. Intensive timber management would be the primary goal of management through this alternative.

The primary impacts from this alternative relate to the effects of timber management, including road building, on wilderness values.

Impacts on Wilderness Values

Since the entire WSA would be recommended as nonsuitable for wilderness designation under this alternative, wilderness values would not be specifically protected through legislation.

Intensive timber management prescribed for 10,000 acres in this WSA over a ten-year period would involve the harvest of 1,973 acres, the construction of 20 miles of road, slash disposal and site preparation through burning on 884 acres, planting on 282 acres, and the fertilization of 309 acres. These activities would result in the removal of vegetation, the presence of new roads and subsequent increased public access, and the introduction of the sights and sounds of man and machinery. As a consequence, the wilderness values for naturalness, solitude, and opportunities for primitive and unconfined recreation would eventually (within two decades) be eliminated on 10,000 acres due to the adverse impacts resulting from the gradual encroachment of timber management activities. During the same time frame, the remainder of the Grandmother Mountain WSA would retain its wilderness values, although the sights and sounds of timber management activities would lessen the feelings of naturalness and solitude.

The WSA would be open for ORV use and such use would affect wilderness values. Recreational ORV use levels are approximately 350 visitor days annually and this use is not expected to increase substantially during or beyond the planning cycle. The 12 miles of existing trail and the 20 miles of new road associated with timber management would be available for recreational ORV use. These trails and roads would provide the physical means for ORV use to adversely affect the wilderness values of solitude and naturalness throughout the WSA since they would facilitate ORV users to traverse the WSA, thus allowing for the sights and sounds of man and machinery to be perceived throughout the majority of the area.

Although the WSA would be open for mineral entry, no mining claims or leases currently exist and no mineral development is anticipated during or beyond the current planning cycle.

Conclusion

The wilderness values of naturalness, solitude, and primitive and unconfined recreation, would be totally eliminated on 10,000 acres of this WSA due to the adverse effects resulting from timber management activities and recreational ORV use. The values of naturalness and solitude would be adversely affected on the remainder of the WSA by the sights and sounds of man and machinery on the adjacent lands.

Impacts on Development of Mineral Resources

All lands within the WSA (17,129 acres) would remain open for mineral entry and mineral leasing. Mineral resources would be available for development. There would be no impact to development of mineral resources.

Conclusion

Potential mineral resources would be available for development. There would be no impact to development of mineral resources.

Impacts on Timber Industry and Local Economy

This alternative would emphasize the management of the WSA for timber values. The 10,000 acres of productive forest land would support an annual harvest of 2,100 MBF of timber. This volume is small in a regional context (approximately .5 percent of harvest from regional federal lands) but would support an estimated 15 lumber-related jobs. The wages corresponding to this potential increase in employment (\$298,000 annually) would contribute to the economy of Shoshone County, primarily. This potential increase would represent approximately .2 percent of current wages for Shoshone County.

Conclusion

There would be slight beneficial impacts to the timber industry and local economy from the intensive timber management prescribed by this alternative.

Impacts on Recreational Off-Road Vehicle Use

This alternative would provide an additional 20 miles of road suitable for ORV use; however, recreational ORV use is not expected to exceed current use levels (350 visitor days annually) in the foreseeable future. Recreational ORV users would benefit from the continued periodic maintenance of existing trails (12 miles, approximately) and from increased opportunities to travel through more of the area with the addition of twenty miles of road over a ten-year period.

Conclusion

This alternative would result in slight beneficial impacts on recreational ORV use.

Impacts on Soil

Under this alternative 10,000 acres would be intensively managed for timber production. The primary impacts to the soils resource resulting from timber harvest practices and associated road construction are soil erosion and compaction.

The estimated erosion rate for undisturbed land in the Coeur d'Alene District is .033 tons per acre per year (21 tons per square mile per year). Construction of logging roads would increase erosion 220 times (Megahan 1972) to 7 tons per acre per year. This rate would diminish to the approximate rate for undisturbed land in 4 years. Based on these findings, the construction of 20 miles of new roads would result in the displacement of approximately 1,630 tons of soil over a ten-year period. An additional 101 tons of soil would be lost as a result of yarding on 1,973 acres and disposal of slash and site preparation on 884 acres.

The total soil displacement (1,731 tons/decade) resulting from the timber management actions prescribed by this alternative would be negligible (.4%) when compared to current displacement totals (410,000 tons/decade) for all BLM lands within the EIS area.

Heavy equipment operation would result in the compaction of soil on about 138 acres. This would change the soil structure of the well developed surface layers causing reduced soil productivity. Compacted soils would be loosened to some degree by frost heaving. It is estimated that compacted soils would recover in a period of 10 to 20 years.

The limited recreational ORV use anticipated under this alternative would not measurably affect soil displacement or compaction.

Conclusion

The timber management activities prescribed by this alternative would increase soil displacement by .4% over current levels. Impacts to soils would be negligible.

Impacts on Water Quality

The primary impact of intensive timber management practices on water quality would be increased sediment yield (soil reaching a water channel) due to land disturbances. Increased sedimentation results in turbidity. It also has adverse effects on fisheries and other water related resources. Other water quality impacts such as changes in nutrient and chemical constituents are caused by vegetation changes, burning, and introduction of fertilizers.

Increased sedimentation would result from surface erosion caused by road construction, yarding, slash disposal, and mechanical scarification. Roads are the major source of soil erosion and subsequent sedimentation in forested areas. Implementation of this alternative would cause the displacement of 1,731 tons of soil over a 10-year period resulting in a sediment yield increase of approximately 1,173 tons (reaching streams and rivers) over the same period. This sediment yield increase is .8% of current sediment yields reaching water courses in the EIS area.

Road construction, timber harvest, yarding, site preparation, and slash disposal would affect the quality of runoff water through increased erosion and leaching of nutrients and chemicals from the exposed soils and plant residues. Burning of plant residue would accelerate the introduction of nutrients and chemicals by changing the form of the residual material. Fertilization could indirectly introduce nutrients and chemicals into water courses.

Vehicle use could create additional water quality impacts by causing soil erosion and compaction with a corresponding increase in surface runoff. These impacts are currently minor and are expected to remain so.

Conclusion

The slight increase in sediment yields resulting from soils reaching streams and rivers would have a negligible adverse impact on regional water quality. Likewise, increased nutrient and chemical levels would have a negligible adverse impact on water quality.

Impacts on Water Supply

There are no domestic water supplies specifically dependent upon the WSA. Therefore, there would be no impacts to water supply.

Conclusion

No impacts to water supply would result from this alternative.

Impacts on Fish

Water yield and sediment yield increases are the primary causal agents which result in impacts to fish.

Water yield would increase from those lands disturbed by road construction, timber harvest, yarding, and slash disposal and would be reduced by fertilization and planting. Increases in water yield decrease exponentially with time, and the rates vary by habitat types. Under this alternative, water yield would increase an estimated 50 acre feet per year. This would result in a slight increase in stream flow and subsequent scouring of channel bottoms in headwater streams, eight of which support fisheries. The increase in stream flow resulting from the anticipated water yield increase is .07 cubic feet per second. This is well below the threshold (.56 cfs increase) where adverse impacts to fish and their habitat become significant in this area (NITMEIS 1981).

Fine sediment is detrimental to fish and their habitat. Suspended sediments cause structural damage to fish gills and bottom sediments adversely impact fish habitat by covering rearing pools, suffocating embryos, and reducing the abundance of aquatic insects needed for food.

Of the 1,173 tons of sediment yield increase predicted to result from soil disturbing activities in this WSA, only an estimated 680 tons over a decade would reach fisheries within the 48 miles of stream and 32 acres of lake which support fish. This amount of sediment yield increase would result in negligible impacts to fish populations and habitat in the WSA.

Conclusion

Increased water yields and increased sediment yields resulting from intensive timber management would not cause measurable impacts to fish and their habitat in the Grandmother Mountain WSA.

Impacts on Vegetation

Intensive timber management activities which would occur under this alternative over a ten-year period would alter vegetation by eliminating biological productivity on the running surface of new and maintained roads (92 acres), damaging and/or destroying vegetation through yarding (202 acres), and modifying natural plant succession on the 1,973 acres to be harvested.

Of these impacts, the modification of plant community succession is the most important. The removal of trees creates openings in the forest canopy, allowing more light to penetrate to lower forest vegetation. Timber harvesting initiates secondary plant succession similar to that caused by natural disturbances. Modifications of plant communities would favor certain plant species over others and, as a consequence, favor certain bird and mammal species over others by changing their habitats.

In the context of the region, and the local area context for that matter, the impacts to vegetation would be insignificant.

Conclusion

The impacts of vegetation (destruction of plants and disruption of natural plant community succession) resulting from this alternative would be inconsequential. Changes in plant community structure/composition would alter wildlife habitats.

Impacts on Mammals and Birds

The primary impact to elk and deer caused by road construction and subsequent use and vegetative modification from timber harvest would be habitat modification and subsequent changes in populations.

Currently elk habitat within the Grandmother Mountain WSA is capable of supporting 340 head. During the planning cycle, modifications to elk habitat would reduce this capability to 317 head. Likewise, deer habitat currently capable of supporting 130 head would only support 126 head. These estimates are based upon the findings of the Northern Idaho Interagency Habitat Task Force (1977). Long-term impacts (beyond the planning cycle) to elk and deer resulting from habitat modification and stress from increased human presence cannot be quantified. However, based on the analysis presented in the North Idaho Timber Management EIS (BIM 1981), only minor changes are anticipated. These changes could be beneficial or adverse to elk and deer depending on future harvest levels, climatic conditions, and future activities on neighboring habitat not managed by BLM.

A small number of moose (less than 10 head) occasionally use about 1,000 acres of this WSA for summer and fall range. Due to the transient nature of this use, the abundance of near-pristine moose habitat on adjoining lands, and the required buffering of moose favoring habitat (stream bottoms/riparian zones) no measurable adverse or beneficial impacts would affect moose habitat or numbers. Improved roaded access to areas frequented by moose could increase the opportunity for illegal harvest of these animals. However, such illegal poaching in this area is rare and most roads would totally avoid the geographic areas favored by moose.

Other mammals and birds (wolverine, Canada lynx, songbirds, cavity-dependent species, and forest grouse) could be displaced by habitat modification and/or removal; however, adequate habitat exists within or immediately adjacent to the WSA to absorb these displaced mammals and birds with no measurable changes in populations anticipated.

Conclusion

During the planning cycle, habitat modification and increased human pressure would reduce elk and deer habitat capacity by 23 head and 4 head, respectively. This would be a negligible reduction in the WSA and local area. In the long-term (beyond the planning cycle) only minor changes are anticipated, the degree of which is unknown at this time. Impacts to birds and other mammals, including the wolverine and Canada lynx (sensitive species), are also predicted to be negligible.

Impacts on Archaeological Resources

Limited cultural resource inventories of this WSA (19% of area inventoried) have not identified any major sites. Professional archaeologists believe that a few temporary camp sites probably exist near the water courses of this WSA. These potential locations are generally outside the areas where ground-disturbing activities would occur. In addition, all actions require a cultural clearance prior to commencement. This would protect the heretofore undiscovered sites which may exist within the WSA.

Conclusion

There would be no impact to archaeological resources.

Impacts on Scenic Quality

Intensive timber harvest and development practices would occur on 10,000 acres. Clearcutting, road construction, and most other timber management practices change vegetative patterns, alter species composition, and disrupt the land surface, thereby causing visual impacts. These impacts would not exceed the visual resource management thresholds established for lands allocated to intensive timber management.

Conclusion

Scenic quality would be adversely affected through implementation of this alternative, but not beyond established visual quality thresholds.

Alternative GM-4, Timber Emphasis/Outstanding Natural Area (ONA)/Research Natural Area (RNA) (Proposed Action)

Under this alternative, the Proposed Action, the entire WSA (17,129 acres) would be recommended as nonsuitable for wilderness designation. Intensive timber management would be the primary goal of management activities on the western one-fourth of the WSA. About one-half of the WSA would be designated as an ONA with the remainder designated an RNA.

The primary impacts from this alternative relate to the effects of timber management on wilderness values, and the effects of the prohibition of timber harvest in ONA and RNA areas on the timber industry and local economy.

Impacts on Wilderness Values

Since the entire WSA would be recommended as nonsuitable for wilderness designation under this alternative, wilderness values would not be specifically protected through legislative mandate. The Research Natural Area (RNA) designation proposed for 2,905 acres would provide administrative protection for wilderness values within the RNA.

Except for the RNA portion, the WSA would be open for ORV use (some seasonal restrictions could be placed on the ONA portion for watershed and wildlife protection) and such use would affect wilderness values. Recreational ORV use levels are about 330 visitor days annually in that portion of the WSA outside the proposed RNA. This use is not expected to increase substantially during or beyond the planning cycle. The vegetative and topographic features of this WSA primarily restrict ORV use to the 12 miles (11.5 miles outside RNA) of existing, maintained trails. Recreational ORV use, while of a small magnitude in this WSA, would adversely affect the wilderness values of naturalness and solitude throughout the WSA (excluding the RNA) since the trail network traverses the WSA and the sights and sounds of man and machinery could be perceived throughout the majority of the area.

In the western portion of the WSA (4,540 acre), intensive timber management is prescribed for 2,941 acres of productive forest land over a ten-year period. This would involve the harvest of 589 acres, the construction of 6 miles of road, slash disposal and site preparation through burning on 264 acres, planting on 84 acres, and the fertilization of 92 acres. These activities would result in the removal of vegetation, the presence of new roads and subsequent increased public access, and the introduction of the sights and sounds of man and machinery. As a consequence, the wilderness values for naturalness, solitude, and opportunities for primitive and unconfined recreation would eventually (within two decades) be eliminated on 4,540 acres due to the adverse impacts resulting from the gradual encroachment of timber management activities. During the same time frame, the rest of the Grandmother Mountain WSA would retain its wilderness values, although the sights and sounds of timber management activities would lessen one's perceptions of naturalness and solitude in all but the eastern third of the WSA.

Although the WSA would be open for mineral entry, no mining claims or leases currently exist and no mineral development is anticipated during or beyond the current planning cycle.

Conclusion

The wilderness values of naturalness, solitude, and primitive and unconfined recreation would be totally eliminated on 4,540 acres of this WSA due to the adverse effects resulting from timber management activities and recreational ORV use. Wilderness values would be retained but adversely affected (naturalness and solitude) by recreational ORV use on 11,283 acres. On the 2,905 acres proposed for RNA designation, wilderness values would be protected.

Impacts on Development of Mineral Resources

All lands within the WSA (17,129 acres) would remain open for mineral entry and mineral leasing. While the potential for mineral development is very low, the mineral resources would be available for development.

Conclusion

There would be no impact on the development of mineral resources from the implementation of this alternative.

Impacts on Timber Industry and Local Economy

This alternative would emphasize the management of 4,540 acres for timber values. The 2,941 acres of productive forest land within this portion of the WSA, would support an annual harvest of 617 MBF of timber. This volume is 1,483 MBF less than the potential annual harvest if all productive forest lands within the WSA (10,000 acres) were managed for timber production. The volume from these 2,941 acres would support an estimated potential increase of 5 lumber-related jobs in the local area. The wages corresponding to these jobs, \$99,400 annually, would primarily contribute to the economy of Shoshone County. This increase would represent approximately .07 percent of current wages in the county.

The timber management actions proposed under this alternative would provide a potential for 10 less jobs and \$198,600 less wages (annually) than would be provided if all productive forest land was intensively managed for timber production.

Conclusion

While there would be slight gains for the timber industry and local economy over current conditions through implementation of this alternative, these gains would be about one-third of the potential gains which intensive timber management of all productive forest lands would provide. In either case, these impacts would be negligible.

Impacts on Recreational Off-Road Vehicle Use

Research Natural Area (RNA) designations on 2,905 acres would close this portion of the WSA to all forms of recreational ORV use. Recreational ORV use of about 20 visitor days would be eliminated annually from the WSA. Some seasonal restrictions on ORV use could be placed on the ONA portion of the WSA to protect watershed and wildlife values during critical times of the year. These restrictions could result in a decrease of approximately 100 annual visitor days of ORV use during certain years. Public land that offers similar opportunities for recreational ORV use is located throughout the region. Therefore, recreational ORV use foregone in these portions of the WSA would be absorbed on adjacent public lands.

This alternative would provide an additional six miles of road suitable for ORV use; however, recreational ORV use is not expected to exceed current use levels (330 visitor days annually outside the proposed RNA) in the foreseeable future. Recreational ORV users would benefit from the continued periodic maintenance of existing trails (11.5 miles outside RNA) and from increased opportunities to travel through more of the area with the addition of six miles of road constructed over a ten-year period.

Conclusion

This alternative would result in slight adverse impacts on recreational ORV use levels, however, the six miles of new road would benefit ORV users when access was permitted.

Impacts on Soil

Under this alternative 2,941 acres of productive forest lands in the western portion of the WSA would be intensively managed for timber production. The primary impacts to the soils resource

resulting from timber harvest practices and associated road construction are soil erosion and compaction.

The estimated erosion rate for undisturbed land in the Coeur d'Alene District is .033 tons per acre per year (21 tons per square mile per year). Construction of logging roads would increase erosion 220 times (Megahan 1972) to 7 tons per acre per year. This rate would diminish to the approximate rate for undisturbed land in 4 years. Based on these findings, the construction of 6 miles of new roads would result in the displacement of approximately 480 tons of soil over a ten-year period. An additional 30 tons of soil would be lost as a result of yarding on 589 acres and disposal of slash and site preparation on 264 acres.

The total soil displacement (510 tons/decade) resulting from the timber management actions prescribed by this alternative would be negligible (.12%) when compared to current displacement totals (410,000 tons/decade) for all BLM lands within the EIS area.

Heavy equipment operation would result in the compaction of soil on about 40 acres. This would change the soil structure of the well developed surface layers causing reduced soil productivity. Compacted soils would be loosened to some degree by frost heaving. It is estimated that compacted soils would recover in a period of 10 to 20 years.

The limited recreational ORV use anticipated under this alternative would not measurably affect soil displacement or compaction.

Conclusion

The timber management activities prescribed by this alternative would increase soil displacement by .12% over current levels. Impacts to soils would be negligible.

Impacts on Water Quality

The primary impact of intensive timber management practices on water quality would be increased sediment yield (soil reaching a water channel) due to land disturbances. Increased sedimentation results in turbidity. It also has adverse effects on fisheries and other water related resources. Other water quality impacts such as changes in nutrient and chemical constituents are caused by vegetation changes, burning, and introduction of fertilizers.

Increased sedimentation would result from surface erosion caused by road construction, yarding, slash disposal, and mechanical scarification. Roads are the major source of soil erosion and subsequent sedimentation in forested areas. Implementation of this alternative would cause the displacement of 510 tons of soil over a 10-year period resulting in a sediment yield increase of approximately 346 tons (reaching streams and rivers) over the same period. This sediment yield increase is .24% of current sediment yields reaching water courses in the EIS area.

Road construction, timber harvest, yarding, site preparation, and slash disposal would affect the quality of runoff water through increased erosion and leaching of nutrients and chemicals from the exposed soils and plant residues. Burning of plant residue would accelerate the introduction of nutrients and chemicals by changing the form of the residual material. Fertilization could indirectly introduce nutrients and chemicals into water courses.

Vehicle use could create additional water quality impacts by causing soil erosion and compaction with a corresponding increase in surface runoff. These impacts are currently minor and are expected to remain so.

Conclusion

The slight increase in sediment yields resulting from soils reaching streams and rivers would have a negligible adverse impact on regional water quality. Likewise, increased nutrient and chemical levels would have a negligible adverse impact on water quality.

Impacts on Water Supply

There are no domestic water supplies specifically dependent upon the WSA. Therefore, there would be no impacts to water supply.

Conclusion

No impacts to water supply would result from this alternative.

Impacts on Fish

Water yield and sediment yield increases are the primary causal agents which result in impacts to fish.

Water yield would increase from those lands disturbed by road construction, timber harvest, yarding, and slash disposal and would be reduced by fertilization and planting. Increases in water yield decrease exponentially with time, and the rates vary by habitat types. Under this alternative, water yield would increase an estimated 15 acre feet per year. This would result in a slight increase in stream flow and subsequent scouring of channel bottoms in headwater streams, two of which support fisheries. The increase in stream flow resulting from the anticipated water yield increase is .02 cubic feet per second. This is well below the threshold (.56 cfs increase) where adverse impacts to fish and their habitat become significant in this area (NITMEIS 1981).

Fine sediment is detrimental to fish and their habitat. Suspended sediments cause structural damage to fish gills and bottom sediments adversely impact fish habitat by covering rearing pools, suffocating embryos, and reducing the abundance of aquatic insects needed for food.

Of the 346 tons of sediment yield increase predicted to result from soil disturbing activities in this WSA, only an estimated 200 tons over a decade would reach fisheries in the 5 miles of streams which support fish in this portion of the WSA. This amount of sediment yield increase would result in negligible impacts to fish populations and habitat in the WSA.

Conclusion

Increased water yields and increased sediment yields resulting from intensive timber management would not cause measurable impacts to fish and their habitat in the Grandmother Mountain WSA.

Impacts on Vegetation

Intensive timber management activities which would occur under this alternative over a ten-year period would alter vegetation by eliminating biological productivity on the running surface of new and maintained roads (27 acres), damaging and/or destroying vegetation through yarding (59 acres), and modifying natural plant succession on the 589 acres to be harvested.

Of these impacts, the modification of plant community succession is the most important. The removal of trees creates openings in the forest canopy, allowing more light to penetrate to lower forest vegetation. Timber harvesting initiates secondary plant succession similar to that caused by natural disturbances. Modifications of plant communities would favor certain plant species over others and, as a consequence, favor certain bird and mammal species over others by changing their habitats.

In the context of the region, and the local area context for that matter, the impacts to vegetation would be insignificant.

Conclusion

The impacts of vegetation (destruction of plants and disruption of natural plant community succession) resulting from this alternative would be inconsequential. Changes in plant community structure/composition would alter wildlife habitats.

Impacts on Mammals and Birds

The primary impact to elk and deer caused by road construction and subsequent use and vegetative modification from timber harvest would be habitat modification and subsequent changes in populations.

Currently elk habitat within the Grandmother Mountain WSA is capable of supporting 340 head. During the planning cycle, modifications to elk habitat would reduce this capability to 333 head. Likewise, deer habitat currently capable of supporting 130 head would only support 128 head. These estimates are based upon the findings of the Northern Idaho Interagency Habitat Task Force (1977). Long-term impacts (beyond the planning cycle) to elk and deer resulting from habitat modification and stress from increased human presence cannot be quantified. However, based on the analysis presented in the North Idaho Timber Management EIS (BLM 1981), only minor changes are anticipated. These changes could be beneficial or adverse to elk and deer depending on future harvest levels, climatic conditions, and future activities on neighboring habitat not managed by BLM.

There would be no impact on moose or their habitat since the area proposed for intensive timber management is located approximately 7 miles west of the area used by moose.

Other mammals and birds (wolverine, Canada lynx, songbirds, cavity-dependent species, and forest grouse) could be displaced by habitat modification and/or removal; however, adequate habitat exists within or immediately adjacent to the WSA to absorb these displaced mammals and birds with no measurable changes in populations anticipated.

Conclusion

During the planning cycle, habitat modification and increased human pressure would reduce elk and deer habitat capacity by 7 head and 2 head, respectively. This would be a negligible reduction in the WSA and local area. In the long-term (beyond the planning cycle) only minor changes are anticipated, the degree of which is unknown at this time. Impacts to birds and other mammals, including the wolverine and Canada lynx (sensitive species), are also predicted to be negligible.

Impacts on Archaeological Resources

Limited cultural resource inventories of this WSA (19% of area inventoried) have not identified any major sites. Professional archaeologists believe that a few temporary camp sites probably exist near the water courses of this WSA. These potential locations are generally outside the areas where ground-disturbing activities would occur. In addition, all actions require a cultural clearance prior to commencement. This would protect the heretofore undiscovered sites which may exist within the WSA.

Conclusion

There would be no impact to archaeological resources.

Impacts on Scenic Quality

Intensive timber harvest and development practices would occur on 2,941 acres of productive forest lands in the western portion of the WSA. Clearcutting, road construction, and most other timber management practices change vegetative patterns, alter species composition, and disrupt the land surface, thereby causing visual impacts. These impacts would not exceed the visual resource management thresholds established for lands allocated to intensive timber management. Scenic quality would be maintained in the ONA and RNA portions of the WSA.

Conclusion

Scenic quality would be adversely affected through implementation of this alternative on the western one-fourth of the WSA. Scenic quality would be maintained on the rest of the WSA.

Alternative GM-5, Partial Wilderness

Under this alternative, a major portion of the WSA (12,589 acres) would be recommended as suitable for wilderness designation with the remaining 4,540 acres recommended as nonsuitable. The primary management emphasis on the nonsuitable portion would be intensive timber management.

Primary impacts from this alternative relate to the prohibitions of intensive timber management activities on 7,059 acres and ORV use on 12,589 acres and elimination of wilderness values on 4,540 acres.

Impacts on Wilderness Values

Under this alternative, 12,589 acres would be recommended as suitable for wilderness designation and all wilderness values on these lands would be protected through legislative mandate.

That portion of the WSA recommended as suitable for wilderness designation would be closed to ORV use. Of a total estimated 350 annual visitor days of current use, 190 visitor days of ORV use in the Grandmother Mountain WSA would be foregone by this action.

While encounters between ORV users and others are infrequent at current use levels, the elimination of ORV use on 12,589 acres would enhance opportunities for solitude in this portion of the WSA. The effects on the area's naturalness as a result of ORV closure would be negligible.

since the existing level of use is quite low and use is dispersed over a large area.

In the western portion of the WSA (4,540 acre), intensive timber management is prescribed for 2,941 acres of productive forest land over a ten-year period. This would involve the harvest of 589 acres, the construction of 6 miles of road, slash disposal and site preparation through burning on 264 acres, planting on 84 acres, and the fertilization of 92 acres. These activities would result in the removal of vegetation, the presence of new roads and subsequent increased public access, and the introduction of the sights and sounds of man and machinery. As a consequence, the wilderness values for naturalness, solitude, and opportunities for primitive and unconfined recreation would eventually (within two decades) be eliminated on 4,540 acres due to the adverse impacts resulting from the gradual encroachment of timber management activities.

Designation of 12,589 acres of this WSA as wilderness would withdraw this portion from mineral entry. There are no mining claims or leases located within the WSA and no mineral development is anticipated on the 4,540 acre portion which would remain open for mineral entry.

Conclusion

The wilderness values of naturalness, solitude, and primitive and unconfined recreation, would be totally eliminated on 4,540 acres of this WSA due to the adverse effects resulting from timber management activities and recreational ORV use. Wilderness values would be protected and maintained on 12,589 acres.

Impacts on Development of Mineral Resources

Wilderness designation would withdraw 12,589 acres of public land from all forms of mineral entry and mineral leasing, subject to valid rights existing at the time of designation. Although there are no mining claims or leases within the WSA and the potential for any development is negligible, the opportunity to explore and develop mineral resources would be foregone under wilderness designation on 12,589 acres.

The remaining 4,540 acres would be left open to all forms of mineral entry. While the potential for mineral development appears to be negligible, opportunities to develop heretofore unknown mineral resources would remain viable. No mineral development is anticipated to occur on the 4,540 acres left open to mineral entry in the foreseeable future.

Conclusion

No impacts, either beneficial or adverse, are anticipated to affect the development of mineral resources within the WSA. The withdrawal of 12,589 acres of the WSA from mineral entry would foreclose on opportunities to develop mineral resources on those lands; however, the potential for development of mineral resources on any portion of the WSA, in any case, is negligible.

Impacts on Timber Industry and Local Economy

This alternative would emphasize the management of 4,540 acres for timber values. The 2,941 acres of productive forest land within this portion of the WSA, would support an annual harvest of 617 MBF of timber. This volume is 1,483 MBF less than the potential annual harvest if all productive forest lands within the WSA (10,000 acres) were managed for timber production. The volume

from these 2,941 acres would support an estimated potential increase of 5 lumber-related jobs in the local area. The wages corresponding to these jobs, \$99,400 annually, would primarily contribute to the economy of Shoshone County. This increase would represent approximately .07 percent of current wages in the county.

The timber management actions proposed under this alternative would provide a potential for 10 less jobs and \$198,600 less wages (annually) than would be provided if all productive forest land was intensively managed for timber production.

Conclusion

While there would be slight gains for the timber industry and local economy over current conditions through implementation of this alternative, these gains would be about one-third of the potential gains which intensive timber management of all productive forest lands would provide. In either case, these impacts would be negligible.

Impacts on Recreational Off-Road Vehicle Use

Under this alternative 12,589 acres of the Grandmother Mountain WSA would be closed to ORV use. Of a total estimated 350 annual visitor days of current use, approximately 190 visitor days of use would be foregone. However, with current and predicted future use levels remaining so low, this use would be readily absorbed by adjacent lands, both inside and outside the WSA. The intensive timber management activities prescribed for the western portion of the WSA would provide additional opportunities to recreational ORV users through the construction of about 6 miles of new road over a ten-year period.

Conclusion

The net impact to recreational ORV use resulting from this alternative would be negligible.

Impacts on Soil

Under this alternative 2,941 acres of productive forest lands in the western portion of the WSA would be intensively managed for timber production. The primary impacts to the soils resource resulting from timber harvest practices and associated road construction are soil erosion and compaction.

The estimated erosion rate for undisturbed land in the Coeur d'Alene District is .033 tons per acre per year (21 tons per square mile per year). Construction of logging roads would increase erosion 220 times (Megahan 1972) to 7 tons per acre per year. This rate would diminish to the approximate rate for undisturbed land in 4 years. Based on these findings, the construction of 6 miles of new roads would result in the displacement of approximately 480 tons of soil over a ten-year period. An additional 30 tons of soil would be lost as a result of yarding on 589 acres and disposal of slash and site preparation on 264 acres.

The total soil displacement (510 tons/decade) resulting from the timber management actions prescribed by this alternative would be negligible (.12%) when compared to current displacement totals (410,000 tons/decade) for all BLM lands within the EIS area.

Heavy equipment operation would result in the compaction of soil on about 40 acres. This would change the soil structure of the well developed surface layers causing reduced soil productivity. Compacted soils would be loosened to some degree by frost heaving. It is estimated that compacted soils would recover in a period of 10 to 20 years.

The limited recreational ORV use anticipated under this alternative would not measurably affect soil displacement or compaction.

Conclusion

The timber management activities prescribed by this alternative would increase soil displacement by .12% over current levels. Impacts to soils would be negligible.

Impacts on Water Quality

The primary impact of intensive timber management practices on water quality would be increased sediment yield (soil reaching a water channel) due to land disturbances. Increased sedimentation results in turbidity. It also has adverse effects on fisheries and other water related resources. Other water quality impacts such as changes in nutrient and chemical constituents are caused by vegetation changes, burning, and introduction of fertilizers.

Increased sedimentation would result from surface erosion caused by road construction, yarding, slash disposal, and mechanical scarification. Roads are the major source of soil erosion and subsequent sedimentation in forested areas. Implementation of this alternative would cause the displacement of 510 tons of soil over a 10-year period resulting in a sediment yield increase of approximately 346 tons (reaching streams and rivers) over the same period. This sediment yield increase is .24% of current sediment yields reaching water courses in the EIS area.

Road construction, timber harvest, yarding, site preparation, and slash disposal would affect the quality of runoff water through increased erosion and leaching of nutrients and chemicals from the exposed soils and plant residues. Burning of plant residue would accelerate the introduction of nutrients and chemicals by changing the form of the residual material. Fertilization could indirectly introduce nutrients and chemicals into water courses.

Vehicle use could create additional water quality impacts by causing soil erosion and compaction with a corresponding increase in surface runoff. These impacts are currently minor and are expected to remain so.

Conclusion

The slight increase in sediment yields resulting from soils reaching streams and rivers would have a negligible adverse impact on regional water quality. Likewise, increased nutrient and chemical levels would have a negligible adverse impact on water quality.

Impacts on Water Supply

There are no domestic water supplies specifically dependent upon the WSA. Therefore, there would be no impacts to water supply.

Conclusion

No impacts to water supply would result from this alternative.

Impacts on Fish

Water yield and sediment yield increases are the primary causal agents which result in impacts to fish.

Water yield would increase from those lands disturbed by road construction, timber harvest, yarding, and slash disposal and would be reduced by fertilization and planting. Increases in water yield decrease exponentially with time, and the rates vary by habitat types. Under this alternative, water yield would increase an estimated 15 acre feet per year. This would result in a slight increase in stream flow and subsequent scouring of channel bottoms in headwater streams, two of which support fisheries. The increase in stream flow resulting from the anticipated water yield increase is .02 cubic feet per second. This is well below the threshold (.56 cfs increase) where adverse impacts to fish and their habitat become significant in this area (NITMEIS 1981).

Fine sediment is detrimental to fish and their habitat. Suspended sediments cause structural damage to fish gills and bottom sediments adversely impact fish habitat by covering rearing pools, suffocating embryos, and reducing the abundance of aquatic insects needed for food.

Of the 346 tons of sediment yield increase predicted to result from soil disturbing activities in this WSA, only an estimated 200 tons over a decade would reach fisheries in the 5 miles of streams which support fish in this portion of the WSA. This amount of sediment yield increase would result in negligible impacts to fish populations and habitat in the WSA.

Conclusion

Increased water yields and increased sediment yields resulting from intensive timber management would not cause measurable impacts to fish and their habitat in the Grandmother Mountain WSA.

Impacts on Vegetation

Intensive timber management activities which would occur under this alternative over a ten-year period would alter vegetation by eliminating biological productivity on the running surface of new and maintained roads (27 acres), damaging and/or destroying vegetation through yarding (59 acres), and modifying natural plant succession on the 589 acres to be harvested.

Of these impacts, the modification of plant community succession is the most important. The removal of trees creates openings in the forest canopy, allowing more light to penetrate to lower forest vegetation. Timber harvesting initiates secondary plant succession similar to that caused by natural disturbances. Modifications of plant communities would favor certain plant species over others and, as a consequence, favor certain bird and mammal species over others by changing their habitats.

In the context of the region, and the local area context for that matter, the impacts to vegetation would be insignificant.

Conclusion

The impacts of vegetation (destruction of plants and disruption of natural plant community succession) resulting from this alternative would be inconsequential. Changes in plant community structure/composition would alter wildlife habitats.

Impacts on Mammals and Birds

The primary impact to elk and deer caused by road construction and subsequent use and vegetative modification from timber harvest would be habitat modification and subsequent changes in populations.

Currently elk habitat within the Grandmother Mountain WSA is capable of supporting 340 head. During the planning cycle, modifications to elk habitat would reduce this capability to 333 head. Likewise, deer habitat currently capable of supporting 130 head would only support 128 head. These estimates are based upon the findings of the Northern Idaho Interagency Habitat Task Force (1977). Long-term impacts (beyond the planning cycle) to elk and deer resulting from habitat modification and stress from increased human presence cannot be quantified. However, based on the analysis presented in the North Idaho Timber Management EIS (BLM 1981), only minor changes are anticipated. These changes could be beneficial or adverse to elk and deer depending on future harvest levels, climatic conditions, and future activities on neighboring habitat not managed by BLM.

There would be no impact on moose or their habitat since the area proposed for intensive timber management is located approximately 7 miles west of the area used by moose.

Other mammals and birds (wolverine, Canada lynx, songbirds, cavity-dependent species, and forest grouse) could be displaced by habitat modification and/or removal; however, adequate habitat exists within or immediately adjacent to the WSA to absorb these displaced mammals and birds with no measurable changes in populations anticipated.

Conclusion

During the planning cycle, habitat modification and increased human pressure would reduce elk and deer habitat capacity by 7 head and 2 head, respectively. This would be a negligible reduction in the WSA and local area. In the long-term (beyond the planning cycle) only minor changes are anticipated, the degree of which is unknown at this time. Impacts to birds and other mammals, including the wolverine and Canada lynx (sensitive species), are also predicted to be negligible.

Impacts on Archaeological Resources

Limited cultural resource inventories of this WSA (19% of area inventoried) have not identified any major sites. Professional archaeologists believe that a few temporary camp sites probably exist near the water courses of this WSA. These potential locations are generally outside the areas where ground-disturbing activities would occur. In addition, all actions require a cultural clearance prior to commencement. This would protect the heretofore undiscovered sites which may exist within the WSA.

Conclusion

There would be no impact to archaeological resources.

Impacts on Scenic Quality

Intensive timber harvest and development practices would occur on 2,941 acres of productive forest lands in the western portion of the WSA. Clearcutting, road construction, and most other timber management practices change vegetative patterns alter species composition, and disrupt the land surface, thereby causing visual impacts. These impacts would not exceed the visual resource management thresholds established for lands allocated to intensive timber management. Scenic quality would be maintained on those lands recommended suitable for wilderness designation (12,589 acres).

Conclusion

Scenic quality would be adversely affected through implementation of this alternative on the western one-fourth of the WSA. Scenic quality would be maintained on the rest of the WSA.

SNOWHOLE RAPIDS WSA (Unit 62-1)

Alternative SR-1, All Wilderness

Under this alternative, the entire WSA (5,068 acres) would be recommended as suitable for wilderness designation.

The primary impacts from this alternative relate to the continued withdrawal of this WSA from mineral entry.

Management actions would be limited to those permitted by the Bureau's wilderness management policy. Activities such as road construction and maintenance, ORV use, and mineral development would not occur. (There are no merchantable trees in the WSA so no timber harvest activities would occur with or without wilderness designation.) In the absence of ground disturbing activities, there would be no impacts to timber industry, soil, water quality, water supply, fish, vegetation, mammals and birds, archaeological resources, and scenic quality.

Conclusion

Since soil disturbing activities would not occur, there would be no impact to the above mentioned impact topics.

It should be noted that six sensitive species (Columbia tiger beetle, bobcat, osprey, mountain quail, river otter, and white sturgeon), which are occasional and transient users of this WSA and the few bald eagles (endangered species) which may winter in the area would not be adversely affected by this alternative since no habitat disturbing actions would occur. Recreational river users would not affect the sensitive aquatic species since the areas used by recreationists and the season of this use does not correspond to the areas and times when the sensitive species may be in the WSA. The non-ground disturbing emphasis of this alternative would also protect the National Register quality cultural sites located in the river canyon.

Impacts on Wilderness Values

Under this alternative all 5,068 acres of the Snowhole Rapids WSA would be recommended as suitable for wilderness designation and wilderness values would be protected by legislative mandate. The WSA is currently withdrawn from mineral entry until 1991 and wilderness designation would perpetuate this withdrawal.

Since the entire WSA would be closed to land-based vehicle use, no recreational ORV use would be permitted. This would not result in adverse or beneficial impacts on wilderness values since no ORV use currently occurs in the WSA.

Recreational use of the Salmon River, both by power boaters and rafters, continues to increase. Management of user volume, even following wilderness designation, would be very difficult in this WSA since those portions of the Salmon River, a navigable river, located both upstream and downstream of this WSA, are basically unmanaged. The configuration of the river canyon concentrates users in a narrow corridor. This concentration of users and the sights and sounds of powerboats (a permitted established nonconforming use) would adversely affect user perceptions of solitude. To date, this use (8,500 annual visitor days) has not played a significant role in reducing the overall opportunities for solitude in the Snowhole Rapids WSA; however, trends of increased use (increase of 1,700 annual visitor days anticipated by end of planning cycle) indicate that definite reductions in opportunities for solitude would result.

Livestock grazing and range management actions would not affect wilderness values in the WSA because no new range developments are planned in the WSA and maintenance activities would not change.

Conclusion

Wilderness designation would retain wilderness values; however, increasing use of the river corridor, primarily by powerboaters, would degrade the value of solitude throughout the WSA.

Impacts on Development of Mineral Resources

Wilderness designation would perpetuate the withdrawal of all 5,068 acres in the WSA from all forms of mineral entry. Although there are no mining claims or leases in the WSA and the potential for any development is negligible, the opportunity to explore and develop mineral resources would be foregone under wilderness designation.

Conclusion

Opportunities to explore and develop mineral resources would be foregone.

Impacts on Recreational Off-Road Vehicle Use

Wilderness designation would close the entire Snowhole Rapids WSA to all forms of land-based recreational ORV use. At the present time, there is no land-based recreational ORV use in the WSA due to its steep topographic features. No use is anticipated in the foreseeable future. Designation of this WSA as wilderness would not impact ORV use.

Conclusion

There would be no impacts to land-based recreational ORV use resulting from this alternative.

Alternative SR-2, No Action/No Wilderness (Proposed Action)

Under this alternative, the entire WSA (5,068 acres) would be recommended as nonsuitable for wilderness designation.

The primary impacts under this alternative relate to the effects of powerboating on wilderness values.

As in the previous alternative, no ground disturbing activities would occur and, therefore, there would be no impacts to timber industry, soil, water quality, water supply, fish, vegetation, mammals and birds, archaeological resources, and scenic quality.

Conclusion

Since soil disturbing activities would not occur, there would be no impact to the above mentioned impact topics.

It should be noted that six sensitive species (Columbia tiger beetle, bobcat, osprey, mountain quail, river otter, and white sturgeon), which are occasional and transient users of this WSA and the few bald eagles (endangered species) which may winter in the area would not be adversely affected by this alternative since no habitat disturbing actions would occur. Recreational river users would not affect the sensitive aquatic species since the areas used by recreationists and the season of this use does not correspond to the areas and times when the sensitive species may be in the WSA. The non-ground disturbing emphasis of this alternative would also protect the National Register quality cultural sites located in the river canyon.

Impacts on Wilderness Values

The entire WSA would be recommended nonsuitable for wilderness designation and none of the wilderness values on 5,068 would receive the special legislative protection provided by wilderness designation. The WSA is currently withdrawn from all forms of mineral entry until 1991 and a formal 20-year withdrawal is pending. Thus, there would be no impacts on wilderness values caused by mineral development.

Although the WSA would be open to land-based ORV use under this alternative, no such use currently exists and none is anticipated in the future due to the rugged topographic features of this river canyon.

Recreational use of the Salmon River, both by powerboaters and rafters, continues to increase. The configuration of the river canyon within the WSA concentrates users in a narrow corridor. This concentration of users and the sights and sounds of powerboats would adversely affect the wilderness value of solitude. To date, this use (8,500 annual visitor days) has not played a significant role in reducing the overall opportunities for solitude in the WSA; however, trends of increased use (increase of 1,700 annual visitor days anticipated by end of planning cycle) indicate that definite reductions in opportunities for solitude would result.

Livestock grazing and range management actions would not affect wilderness values in the WSA because no range developments are planned in the WSA and maintenance activities would not change.

Conclusion

Increasing use of the river corridor, primarily by powerboaters, would reduce the area's opportunities for solitude.

Impacts on Development of Mineral Resources

This WSA is currently withdrawn from all forms of mineral entry until 1991 and a formal 20-year withdrawal is pending. Implementation of this alternative would have no effect on the development of mineral resources in the Snowhole Rapids WSA.

Conclusion

There would be no impacts on mineral resource development caused by implementation of this alternative since such activities are not authorized. The current and pending withdrawals of this area would cause all opportunities to explore and develop mineral resources to be foregone.

Impacts on Recreational Off-Road Vehicle Use

Under this alternative the entire WSA would be open to land-based ORV use. Currently, there is no land-based recreational ORV use in the WSA due to its rugged topographic features. No use is anticipated in the future. Implementation of this alternative would not affect ORV use.

Conclusion

There would be no impacts to land-based recreational ORV use resulting from this alternative.

MARSHALL MOUNTAIN WSA (Unit 62-10)

Alternative MM-1, All Wilderness

Under this alternative, the entire WSA (5,804 acres) would be recommended as suitable for wilderness designation.

The primary impacts from this alternative relate to the effects the prohibition of timber harvest would have on the timber industry and local economy.

Management actions would be limited to those permitted by the Bureau's wilderness management policy. Timber harvest, mineral development, and such supporting activities as road construction and maintenance, ground based and cable yarding, slash disposal and debris burning would not occur. In the absence of ORV, timber harvest, and mineral development activities, there would be no impacts to soil, water quality, water supply, fish, vegetation, mammals and birds, archaeological resources, and scenic quality.

Conclusion

Since soil disturbing activities would not occur, there would be no impact to the above mentioned impact topics.

Impacts on Wilderness Values

Under this alternative all 5,804 acres of the WSA would be recommended as suitable for wilderness designation and all wilderness values would be protected by legislative mandate.

The estimated 10 annual visitor days of ORV use in the Marshall Mountain WSA would be foregone by wilderness designation. Although these use levels are very low and encounters between ORV users and others are infrequent at current (and static future) use levels, the elimination of ORV use would enhance opportunities for solitude. The effects on the area's naturalness as a result of ORV closure would be negligible since the existing level of use is so low.

Livestock grazing and range management actions would not affect wilderness values since no range developments are planned in the WSA and no facilities that require maintenance are located within the WSA.

Upon designation as wilderness, all lands within the WSA (5,804 acres) would, subject to valid rights then existing, be withdrawn from all forms of appropriation under the mining laws. Currently there are approximately 150 lode mining claims in the unit; however, none have been developed into operational sites and no plans of operation have been filed. The lack of activity on these claims is primarily due to the depressed market for gold, silver, and base metals and the marginal quality and quantity of the ore bodies in the vicinity of these claims. Any claims that exist at the time of designation and have approved plans of operation would be examined for validity verification. For the reasons mentioned above, no mineral production is expected to occur.

In the unlikely event that economic conditions drastically change and new ore extraction and processing technology becomes available in the near future, it is possible that 50% of the claims in this unit could be found to be valid and could undergo some level of development. This would result in the construction of approximately 95 miles of road and surface disturbance (for roads, excavations, etc.) on approximately 375 acres. Actual impacts would not be limited to disturbed areas since the disturbance would be widespread and visible from much of the WSA. These actions would eventually eliminate all wilderness values within this WSA.

There are no known mineral values for either leasable or saleable minerals in the WSA and no leases or permits would be issued under this wilderness alternative.

Conclusion

Wilderness values are expected to be maintained on the entire Marshall Mountain WSA, unless the unforeseen mineral development mentioned above should occur. In that case, all wilderness values would be eliminated over time.

Impacts on Development of Mineral Resources

Wilderness designation would withdraw all 5,804 acres of public land from all forms of mineral entry and mineral leasing, subject to valid rights existing at the time of designation. Those

mining claims which have plans of operations filed and approved at the time of designation for wilderness (currently, approximately 150 lode mining claims exist within the WSA but none have plans of operation filed) would be examined to verify validity. Those that meet this criteria and are found to be valid would be determined to have "valid existing rights" which would allow continued development following wilderness designation. The current lack of activity on these claims is primarily due to the depressed market for gold, silver, and base metals and the marginal quality and quantity of the ore bodies in the vicinity of these claims. For these reasons, it is highly unlikely that any plans of operation would be filed since future economic conditions would not support profitable development of low grade ore bodies. For those claims not found to be valid, all future development potential would be foregone. This is the only situation where mineral development would be affected and the impact is deemed to be quite small and unquantifiable. There are no known mineral values for either leasable or saleable minerals in the WSA. No mineral development is anticipated with or without wilderness designation.

Conclusion

No mineral development activities are anticipated to occur. Therefore, there would be no impacts on the development of mineral resources.

Impacts on Timber Industry and Local Economy

Wilderness designation would prohibit intensive timber management activities, including timber harvest and road building, on the entire WSA. This would eliminate a potential annual harvest of 724 MBF of timber. This volume of timber harvest would represent about .13 percent of the annual harvest from federal forest lands within the EIS study area. By not permitting intensive timber management in this WSA, this alternative would eliminate a potential increase of 5 lumber-related jobs in the local area.

Five jobs represent approximately .17 percent of the total employment in Idaho County, the area which would be primarily affected by actions in this WSA.

Conclusion

A potential annual harvest of 724 MBF of timber and a corresponding potential increase if 5 lumber-related jobs would be foregone under this alternative. These potential economic gains would be insignificant to the economies of the local area or the region.

Impacts of Recreational Off-Road Vehicle Use

Wilderness designation would close the entire 5,804-acre Marshall Mountain WSA to all forms of recreational ORV use. Recreational ORV use of approximately 10 visitor days would be eliminated annually from the WSA. Public land that offers similar opportunities for recreational ORV use is located throughout the region. Therefore, recreational ORV use foregone in the WSA would be absorbed on surrounding public lands.

Conclusion

Recreational ORV use of 10 visitor days would be foregone annually. The impacts of shifting this use to other public lands would be negligible.

The primary impacts from this alternative relate to the effects the prohibition of timber harvest would have on the timber industry and local economy.

As in the previous alternative, no ground disturbing activities would occur and, therefore, there would be no impacts to soil, water quality, water supply, fish, vegetation, mammals and birds, archaeological resources, and scenic quality.

Conclusion

Since soil disturbing activities would not occur, there would be no impact to the above mentioned impact topics.

Impacts on Wilderness Values

Since the entire WSA would be recommended as nonsuitable for wilderness designation under this alternative, wilderness values would not be specifically protected through legislation.

Recreational ORV use, occurring at an extremely low rate of about 10 visitor days annually, is not expected to increase measurably during the planning cycle, or beyond. Therefore, only negligible adverse impacts to the wilderness values of solitude and naturalness would be anticipated from ORV use.

Under this alternative, the entire 5,804 acres of the Marshall Mountain WSA would be open for mineral entry. Based on the number of lode mining claims in the WSA, there is an interest in mineral activity within the unit. None of these claims have been developed into operational sites and no plans of operation have been filed, primarily because of depressed market conditions and the relatively marginal mineral values in the vicinity of these claims. Future activity is directly dependent upon greatly improved market conditions and/or new mining technology which would enhance the ability of any operation to be economically sound. Should these conditions occur, the exploration and development actions throughout this WSA would gradually eliminate all wilderness values in this WSA. However, recent studies indicate that conditions suitable for development will probably not occur during this planning cycle or the near future following it (15-20 years).

Conclusion

Recreational ORV use would have negligible adverse impacts on solitude and naturalness. All wilderness values could be eliminated in the long-term if conditions became conducive for profitable mineral development; however, such conditions are not expected to occur within the next 15-20 years. Therefore, only slight adverse impacts to wilderness values are expected to result from implementation of this alternative.

Impacts on Development of Mineral Resources

All lands within the WSA (5,804 acres) would remain open for mineral entry and mineral leasing. Although no mineral development is anticipated, mineral resources would be available for development. There would be no impacts on the development of mineral resources.

Conclusion

There would be no impact to development of mineral resources.

Impacts on Timber Industry and Local Economy

This alternative would prohibit intensive timber management activities, including timber harvest and road building, on the entire WSA. This would eliminate a potential annual harvest of 724 MBF of timber. This volume of timber harvest would represent about .13 percent of the annual harvest from federal forest lands within the EIS study area. By not permitting intensive timber management in this WSA, this alternative would eliminate a potential increase of 5 lumber-related jobs in the local area.

Five jobs represent approximately .17 percent of the total employment in Idaho County, the area which would be primarily affected by actions in this WSA.

Conclusion

A potential annual harvest of 724 MBF of timber and a corresponding potential increase if 5 lumber-related jobs would be foregone under this alternative. These potential economic gains would be insignificant to the economies of the local area or the region.

Impacts of Recreational Off-Road Vehicle Use

This alternative would permit recreational ORV use on the entire WSA. Current use levels are very low at 10 visitor days annually and such use would not increase substantially in the future. There would be no adverse or beneficial impacts to ORV use.

Conclusion

There would be no impacts on recreational ORV use.

Alternative MM-3, Timber Emphasis

Under this alternative, the entire Marshall Mountain WSA (5,804 acres) would be recommended as nonsuitable for wilderness designation. Intensive timber management would be the primary goal of management actions prescribed under this alternative.

Primary impacts from this alternative relate to the effects of timber management, including road building, on wilderness values.

Impacts on Wilderness Values

Since the entire WSA would be recommended as nonsuitable for wilderness designation under this alternative, wilderness values would not be specifically protected through legislation.

Intensive timber management prescribed for 3,920 acres in this WSA over a ten-year period

would involve the harvest of 775 acres, the construction of 7.8 miles of road, slash disposal and site preparation through burning on 347 acres, planting on 111 acres, and the fertilization of 121 acres. These activities would result in the removal of vegetation, the presence of new roads and subsequent increased public access, and the introduction of the sights and sounds of man and machinery. As a consequence, the wilderness values for naturalness, solitude, and opportunities for primitive and unconfined recreation would eventually (within two decades) be eliminated on 3,920 acres due to the adverse impacts resulting from the gradual encroachment of timber management activities. During the same time frame, the remainder of the Marshall Mountain WSA would retain its wilderness values, although the sights and sounds of timber management activities would lessen the feelings of naturalness and solitude.

The WSA would be open for ORV use; however, such use is currently very limited (10 visitor days annually) and is expected to remain so. The sights and sounds of ORV use would have only slight adverse impacts on the wilderness values of solitude and naturalness.

Under this alternative, the entire 5,804 acres of the Marshall Mountain WSA would be open for mineral entry. The number of claims indicates an interest in the area in regard to mineral activity. None of these claims have been developed into operational sites and no plans of operation have been filed, primarily because of depressed market conditions and the relatively marginal mineral values in the vicinity of these claims. Future activity is directly dependent upon greatly improved market conditions and/or new mining technology which would enhance the ability of any operation to be economically sound. Should these conditions occur, the exploration and development actions throughout this WSA would gradually eliminate all wilderness values in this WSA. However, recent studies indicate that conditions suitable for development will probably not occur during this planning cycle or the near future following it (15-20 years).

Conclusion

The wilderness values of naturalness, solitude, and primitive and unconfined recreation would be totally eliminated on 3,920 acres of this WSA due to the adverse effects resulting from intensive timber management activities. The values of naturalness and solitude would be adversely affected on the remainder of the WSA by the sights and sounds of man and machinery on the adjacent lands.

Impacts on Development of Mineral Resources

All lands within the WSA (5,804 acres) would remain open for mineral entry and mineral leasing. Although no mineral development is anticipated, mineral resources would be available for development. There would be no impacts on the development of mineral resources.

Conclusion

There would be no impact to development of mineral resources.

Impacts on Timber Industry and Local Economy

This alternative would emphasize the management of the WSA for timber values. The 3,920 acres of productive forest land would support an annual harvest of 724 MBF of timber. This volume is small in a regional context (approximately .13 percent of harvest from regional federal lands) but

would support an estimated 5 lumber-related jobs. The wages corresponding to this potential increase in employment (\$91,000 annually) would contribute to the economy of Idaho County, primarily. This potential increase would represent about .24 percent of current wages for Idaho County.

Conclusion

There would be slight beneficial impacts to the timber industry and local economy from the intensive timber management prescribed by this alternative.

Impacts on Recreational Off-Road Vehicle Use

This alternative would provide an additional 7.8 miles of road suitable for ORV use; however recreational ORV use is not expected to exceed current levels (10 visitor days annually) in the foreseeable future. The small number of users would benefit from increased opportunities to travel throughout the unit with the addition of 7.8 miles of road over a ten-year period.

Conclusion

This alternative would result in slight beneficial impacts on recreational ORV use.

Impacts on Soil

Under this alternative 3,920 acres would be intensively managed for timber production. The primary impacts to the soils resource resulting from timber harvest practices and associated road construction are soil erosion and compaction.

The estimated erosion rate for undisturbed land in the Coeur d'Alene District is .033 tons per acre per year (21 tons per square mile per year). Construction of logging roads would increase erosion 220 times (Megahan 1972) to 7 tons per acre per year. This rate would diminish to the approximate rate for undisturbed land in 4 years. Based on these findings, the construction of 7.8 miles of new roads would result in the displacement of approximately 636 tons of soil over a ten-year period. An additional 35 tons of soil would be lost as a result of yarding on 775 acres and disposal of slash and site preparation on 347 acres.

The total soil displacement (671 tons/decade) resulting from the timber management actions prescribed by this alternative would be negligible (.16%) when compared to current displacement totals (410,000 tons/decade) for all BLM lands within the EIS area.

Heavy equipment operation would result in the compaction of soil on about 50 acres. This would change the soil structure of the well developed surface layers causing reduced soil productivity. Compacted soils would be loosened to some degree by frost heaving. It is estimated that compacted soils would recover in a period of 10 to 20 years.

The very limited recreational ORV use anticipated under this alternative would not measurably affect soil displacement or compaction.

Conclusion

The timber management activities prescribed by this alternative would increase soil displacement by .16% over current levels. Impacts to soils would be negligible.

Impacts on Water Quality

The primary impact of intensive timber management practices on water quality would be increased sediment yield (soil reaching a water channel) due to land disturbances. Increased sedimentation results in turbidity. It also has adverse effects on fisheries and other water related resources. Other water quality impacts such as changes in nutrient and chemical constituents are caused by vegetation changes, burning, and introduction of fertilizers.

Increased sedimentation would result from surface erosion caused by road construction, yarding, slash disposal, and mechanical scarification. Roads are the major source of soil erosion and subsequent sedimentation in forested areas. Implementation of this alternative would cause the displacement of 671 tons of soil over a 10-year period resulting in a sediment yield increase of approximately 460 tons (reaching streams and rivers) over the same period. This sediment yield increase is .3% of current sediment yields reaching water courses in the EIS area.

Road construction, timber harvest, yarding, site preparation, and slash disposal would affect the quality of runoff water through increased erosion and leaching of nutrients and chemicals from the exposed soils and plant residues. Burning of plant residue would accelerate the introduction of nutrients and chemicals by changing the form of the residual material. Fertilization could indirectly introduce nutrients and chemicals into water courses.

Vehicle use could create additional water quality impacts by causing soil erosion and compaction with a corresponding increase in surface runoff. These impacts are currently minor and are expected to remain so.

Conclusion

The slight increase in sediment yields resulting from soils reaching streams and rivers would have a negligible adverse impact on regional water quality. Likewise, increased nutrient and chemical levels would have a negligible adverse impact on water quality.

Impacts on Water Supply

There are no domestic water supplies specifically dependent upon this WSA. Therefore, there would be no impacts to water supply.

Conclusion

No impacts to water supply would result from this alternative.

Impacts on Fish

The only water bodies that support fish are two small lakes in the western portion of the unit. Both of these lakes are isolated from the areas within which intensive timber management activities would occur and due to their geographic setting, would not be impacted by any activities. None of the streams in the WSA support fish.

Conclusion

There would be no impacts on fish.

Impacts on Vegetation

Intensive timber management activities which would occur under this alternative over a ten-year period would alter vegetation by eliminating biological productivity on the running surface of new and maintained roads (37 acres), damaging and/or destroying vegetation through yarding (70 acres), and modifying natural plant succession on the 775 acres to be harvested.

Of these impacts, the modification of plant community succession is the most important. The removal of trees creates openings in the forest canopy, allowing more light to penetrate to lower forest vegetation. Timber harvesting initiates secondary plant succession similar to that caused by natural disturbances. Modifications of plant communities would favor certain plant species over others and, as a consequence, favor certain bird and mammal species over others by changing their habitats.

In the context of the region, and the local area context for that matter, the impacts to vegetation would be insignificant.

Conclusion

The impacts of vegetation (destruction of plants and disruption of natural plant community succession) resulting from this alternative would be inconsequential. Changes in plant community structure/composition would alter wildlife habitats.

Impacts on Mammals and Birds

The primary impact to elk and deer caused by road construction and subsequent use and vegetative modification from timber harvest would be habitat modification and subsequent changes in populations.

Currently elk habitat within the Marshall Mountain WSA is capable of supporting 40 head. During the planning cycle, modifications to elk habitat would reduce this capability to 37 head. Likewise, deer habitat currently capable of supporting 60 head would support 58 head. These estimates are based upon the findings of the Northern Idaho Interagency Habitat Task Force (1977). Long-term impacts (beyond the planning cycle) to elk and deer resulting from habitat modification and stress from increased human presence cannot be quantified. However, based on the analysis presented in the North Idaho Timber Management EIS (BLM 1981), only minor changes are anticipated. These changes could be beneficial or adverse to elk and deer depending on future harvest levels, climatic conditions, and future activities on neighboring habitat not managed by BLM.

Other mammals and birds (wolverine, Canada lynx, bobcat, songbirds, cavity-dependent species, and forest grouse) could be displaced by habitat modification and/or removal; however, adequate habitat exists within or immediately adjacent to the WSA to absorb these displaced mammals and birds with no measurable changes in populations anticipated.

Conclusion

During the planning cycle, habitat modification and increased human pressure would reduce elk and deer habitat capacity by 3 head and 2 head, respectively. This would be a negligible reduction in the WSA and local area. In the long-term (beyond the planning cycle) only minor changes are anticipated, the degree of which is unknown at this time. Impacts to birds and other mammals, including wolverine, Canada lynx, and bobcat (sensitive species), are also predicted to be negligible.

Impacts on Archaeological Resources

Limited cultural resource inventories in the general area of this WSA have not identified any major sites. In addition, all ground-disturbing actions require a cultural clearance prior to commencement. This would protect the heretofore undiscovered sites which may exist within the WSA.

Conclusion

There would be no impact to archaeological resources.

Impacts on Scenic Quality

Intensive timber harvest and development practices would occur on 3,920 acres. Clearcutting, road construction, and most other timber management practices change vegetative patterns, alter species composition, and disrupt the land surface, thereby causing visual impacts. These impacts would not exceed the visual resource management thresholds established for lands allocated to intensive timber management.

Conclusion

Scenic quality would be adversely affected through implementation of this alternative, but not beyond established thresholds.

Alternative MM-4, Partial Wilderness

Under this alternative, 1,680 acres in the northern portion of the WSA adjacent to the Frank Church River of No Return Wilderness Area would be recommended as suitable for wilderness designation. The remaining 4,124 acres would be recommended as nonsuitable for wilderness designation.

The primary management emphasis on the nonsuitable portion would be intensive timber management.

Primary impacts of this alternative relate to the elimination of wilderness values on 4,124 acres resulting from intensive timber management.

Impacts on Wilderness Values

Under this alternative, the northern 1,680 acres of this WSA would be recommended as suitable

for wilderness designation. All wilderness values in this portion of the WSA would be protected by legislative mandate. The remaining 4,124 acres of the Marshall Mountain WSA would be recommended as nonsuitable for wilderness designation.

That portion of the WSA recommended as suitable for wilderness designation would be closed to ORV use but since no such use occurs in this portion of the WSA, there would be no impacts on wilderness values resulting from this closure. Also, no livestock grazing occurs or is planned for this portion of the WSA, thus, there would be no impacts on wilderness values resulting from livestock grazing or range actions.

Upon designation as wilderness, 1,680 acres within the WSA would, subject to valid rights then existing, be withdrawn from all forms of appropriation under the mining laws. Currently there are approximately 74 lode mining claims in this portion of the unit; however, none have been developed into operational sites and no plans of operation have been filed. The lack of activity on these claims is primarily due to the depressed market for gold, silver, and base metals and the marginal quality and quantity of the ore bodies in the vicinity of these claims. Any claims that exist at the time of designation and have approved plans of operation would be examined for validity verification. For the reasons mentioned above, no mineral production is expected to occur.

In the unlikely event that economic conditions drastically change and new ore extraction and processing technology becomes available in the near future, it is possible that 50% of the claims in this portion could be found to be valid and could undergo some level of development. This would result in the construction of approximately 47 miles of road and surface disturbance (for roads, excavations, etc.) on approximately 187 acres. Actual impacts would not be limited to disturbed areas since the disturbance would be widespread and visible from much of this portion. These actions would eventually eliminate all wilderness values on this portion of the WSA.

There are no known mineral values for either leasable or saleable minerals in this portion of the WSA and no leases or permits would be issued under this partial wilderness alternative in this 1,680 acre portion of the WSA.

Intensive timber management prescribed for 2,280 acres of productive forest lands over a ten-year period within the 4,124 acre portion recommended as nonsuitable for wilderness designation would involve the harvest of 443 acres, construction of 4.5 miles of road, slash disposal and site preparation through burning on 202 acres, planting on 63 acres, and the fertilization of 69 acres. These activities would result in the removal of vegetation, the presence of new roads and subsequent increased public access, and the introduction of the sights and sounds of man and machinery. As a consequence, the wilderness values for naturalness, solitude, and opportunities for primitive and unconfined recreation would eventually (within two decades) be eliminated on 2,280 acres due to the adverse impacts resulting from the gradual encroachment of timber management activities. During the same time frame, the remainder of this portion of the WSA (1,844 acres) would retain its wilderness values, although the sights and sounds of timber management activities would lessen the feelings of naturalness and solitude.

This portion of the WSA would be open for ORV use; however such use is currently very limited (10 visitor days annually) and is expected to remain so. The sights and sounds of ORV use would have only slight adverse impacts on the wilderness values of solitude and naturalness.

Under this alternative, 4,124 acres of the Marshall Mountain WSA would be open for mineral entry. Based on the number of lode mining claims in this portion of the WSA, there is an interest in mineral activity within the unit. None of these claims have been developed into operational sites and no plans of operation have been filed, primarily because of depressed market conditions and the relatively marginal mineral values in the vicinity of these claims. Future activity is

directly dependent upon greatly improved market conditions and/or new mining technology which would enhance the ability of any operation to be economically sound. Should these conditions occur, the exploration and development actions throughout this area would gradually eliminate all wilderness values in this 4,124 acre portion of the WSA. However, recent studies indicate that conditions suitable for development will probably not occur in the near future (15-20 years).

Conclusion

Wilderness values are expected to be maintained on the 1,680 acre portion of this WSA recommended as suitable for wilderness designation under this alternative. The wilderness values of naturalness, solitude, and primitive and unconfined recreation would be totally eliminated on 2,280 acres of the 4,124 acre portion of the WSA recommended as nonsuitable due to the adverse effects resulting from intensive timber management activities. The values of naturalness and solitude would be adversely affected on the remainder of this portion of the WSA by the sights and sounds of man and machinery on the adjacent lands. Should unforeseen mineral development occur, wilderness values would be gradually eliminated throughout the entire WSA.

Impacts on Development of Mineral Resources

Wilderness designation of 1,680 acres would withdraw these public lands from all forms of mineral entry and mineral leasing, subject to valid rights existing at the time of designation. Those mining claims which have plans of operations filed and approved at the time of designation for wilderness (currently, approximately 74 lode mining claims exist within this portion of the WSA but none have plans of operation filed) would be examined to verify validity. Those that meet this criteria and are found to be valid would be determined to have "valid existing rights" which would allow continued development following wilderness designation. For those claims not found to be valid, all future development potential would be foregone. The current lack of activity on these claims is primarily due to the depressed market for gold, silver, and base metals and the marginal quality and quantity of the ore bodies in the vicinity of these claims. For these reasons, it is highly unlikely that any plans of operation would be filed since future economic conditions would not support profitable development of low grade ore bodies.

The remainder of this WSA (4,124 acres) would remain open for mineral entry and mineral leasing. There would be no impacts on the development of mineral resources.

Conclusion

There would be no impacts on the development of mineral resources.

Impacts on Timber Industry and Local Economy

This alternative would emphasize the management of 4,124 acres of this WSA for timber values. The 2,280 acres of productive forest lands within this portion of the WSA would support an annual harvest of 421 MBF of timber. This volume is small in a regional context (approximately .08 percent of harvest from regional federal lands) but would support an estimated 3 lumber-related jobs. The wages corresponding to this potential increase in employment (\$55,000 annually) would contribute to the economy of Idaho County, primarily. This potential increase would represent about .14 percent of current wages for Idaho County.

Conclusion

There would be slight beneficial impacts to the timber industry and local economy from the intensive timber management prescribed by this alternative.

Impacts on Recreational Off-Road Vehicle Use

That portion of the WSA recommended as suitable for wilderness designation (1,680 acres) would be closed to ORV use. Since no recreational ORV use occurs in this portion of the WSA, nor is any anticipated in the future, there would be no impacts to recreational ORV use in this portion of the WSA resulting from wilderness designation.

This alternative would provide an additional 4.5 miles of road for ORV use in the nonsuitable portion of the WSA; however, recreational ORV use is not expected to exceed current levels (10 visitor days annually) in the foreseeable future. The small number of users would benefit from increased opportunities to travel throughout the unit with the addition of 4.5 miles of road over a ten-year period.

Conclusion

This alternative would result in slight beneficial impacts on recreational ORV use.

Impacts on Soil

Under this alternative 2,280 acres would be intensively managed for timber production. The primary impacts to the soils resource resulting from timber harvest practices and associated road construction are soil erosion and compaction.

The estimated erosion rate for undisturbed land in the Coeur d'Alene District is .033 tons per acre per year (21 tons per square mile per year). Construction of logging roads would increase erosion 220 times (Megahan 1972) to 7 tons per acre per year. This rate would diminish to the approximate rate for undisturbed land in 4 years. Based on these findings, the construction of 4.5 miles of new roads would result in the displacement of approximately 370 tons of soil over a ten-year period. An additional 20 tons of soil would be lost as a result of yarding on 443 acres and disposal of slash and site preparation on 202 acres.

The total soil displacement (390 tons/decade) resulting from the timber management actions prescribed by this alternative would be negligible (.1%) when compared to current displacement totals (410,000 tons/decade) for all BLM lands within the EIS area.

Heavy equipment operation would result in the compaction of soil on about 29 acres. This would change the soil structure of the well developed surface layers causing reduced soil productivity. Compacted soils would be loosened to some degree by frost heaving. It is estimated that compacted soils would recover in a period of 10 to 20 years.

The very limited recreational ORV use anticipated under this alternative would not measurably affect soil displacement or compaction.

Conclusion

The timber management activities prescribed by this alternative would increase soil displacement by .1% over current levels. Impacts to soils would be negligible.

Impacts on Water Quality

The primary impact of intensive timber management practices on water quality would be increased sediment yield (soil reaching a water channel) due to land disturbances. Increased sedimentation results in turbidity. It also has adverse effects on fisheries and other water related resources. Other water quality impacts such as changes in nutrient and chemical constituents are caused by vegetation changes, burning, and introduction of fertilizers.

Increased sedimentation would result from surface erosion caused by road construction, yarding, slash disposal, and mechanical scarification. Roads are the major source of soil erosion and subsequent sedimentation in forested areas. Implementation of this alternative would cause the displacement of 390 tons of soil over a 10-year period resulting in a sediment yield increase of approximately 267 tons (reaching streams and rivers) over the same period. This sediment yield increase is .17% of current sediment yields reaching water courses in the EIS area.

Road construction, timber harvest, yarding, site preparation, and slash disposal would affect the quality of runoff water through increased erosion and leaching of nutrients and chemicals from the exposed soils and plant residues. Burning of plant residue would accelerate the introduction of nutrients and chemicals by changing the form of the residual material. Fertilization could indirectly introduce nutrients and chemicals into water courses.

Vehicle use could create additional water quality impacts by causing soil erosion and compaction with a corresponding increase in surface runoff. These impacts are currently minor and are expected to remain so.

Conclusion

The slight increase in sediment yields resulting from soils reaching streams and rivers would have a negligible adverse impact on regional water quality. Likewise, increased nutrient and chemical levels would have a negligible adverse impact on water quality.

Impacts on Water Supply

There are no domestic water supplies specifically dependent upon this WSA. Therefore, there would be no impacts to water supply.

Conclusion

No impacts to water supply would result from this alternative.

Impacts on Fish

The only water bodies that support fish are two small lakes in the western portion of the unit. Both of these lakes are isolated from the areas within which intensive timber management activities would occur and due to their geographic setting, would not be impacted by any activities. None of the streams in the WSA support fish.

Conclusion

There would be no impacts on fish.

Impacts on Vegetation

Intensive timber management activities which would occur under this alternative over a ten-year period would alter vegetation by eliminating biological productivity on the running surface of new and maintained roads (21 acres), damaging and/or destroying vegetation through yarding (41 acres), and modifying natural plant succession on the 443 acres to be harvested.

Of these impacts, the modification of plant community succession is the most important. The removal of trees creates openings in the forest canopy, allowing more light to penetrate to lower forest vegetation. Timber harvesting initiates secondary plant succession similar to that caused by natural disturbances. Modifications of plant communities would favor certain plant species over others and, as a consequence, favor certain bird and mammal species over others by changing their habitats.

In the context of the region, and the local area context for that matter, the impacts to vegetation would be insignificant.

Conclusion

The impacts of vegetation (destruction of plants and disruption of natural plant community succession) resulting from this alternative would be inconsequential. Changes in plant community structure/composition would alter wildlife habitats.

Impacts on Mammals and Birds

The primary impact to elk and deer caused by road construction and subsequent use and vegetative modification from timber harvest would be habitat modification and subsequent changes in populations.

Currently elk habitat within the Marshall Mountain WSA is capable of supporting 40 head. During the planning cycle, modifications to elk habitat would reduce this capability to 38 head. Likewise, deer habitat currently capable of supporting 60 head would support 59 head. These estimates are based upon the findings of the Northern Idaho Interagency Habitat Task Force (1977). Long-term impacts (beyond the planning cycle) to elk and deer resulting from habitat modification and stress from increased human presence cannot be quantified. However, based on the analysis presented in the North Idaho Timber Management EIS (BLM 1981), only minor changes are anticipated. These changes could be beneficial or adverse to elk and deer depending on future harvest levels, climatic conditions, and future activities on neighboring habitat not managed by BLM.

Other mammals and birds (wolverine, Canada lynx, bobcat, songbirds, cavity-dependent species, and forest grouse) could be displaced by habitat modification and/or removal; however, adequate habitat exists within or immediately adjacent to the WSA to absorb these displaced mammals and birds with no measurable changes in populations anticipated.

Conclusion

During the planning cycle, habitat modification and increased human pressure would reduce elk and deer habitat capacity by 2 head and 1 head, respectively. This would be a negligible reduction in the WSA and local area. In the long-term (beyond the planning cycle) only minor changes are anticipated, the degree of which is unknown at this time. Impacts to birds and other mammals,

including wolverine, Canada lynx, and bobcat (sensitive species), are also predicted to be negligible.

Impacts on Archaeological Resources

Limited cultural resource inventories in the general area of this WSA have not identified any major sites. In addition, all ground-disturbing actions require a cultural clearance prior to commencement. This would protect the heretofore undiscovered sites which may exist within the WSA.

Conclusion

There would be no impact to archaeological resources.

Impacts on Scenic Quality

Intensive timber harvest and development practices would occur on 2,280 acres. Clearcutting, road construction, and most other timber management practices change vegetative patterns, alter species composition, and disrupt the land surface, thereby causing visual impacts. These impacts would not exceed the visual resource management thresholds established for lands allocated to intensive timber management.

Conclusion

Scenic quality would be adversely affected through implementation of this alternative, but not beyond established thresholds.

TABLE 4-1
RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND
ENHANCEMENT OF LONG-TERM PRODUCTIVITY AND THE IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES

<u>Alternative Consideration</u>	<u>Short-term Use (Within 10 Years)</u>	<u>Long-term Productivity¹ (10+ Years)</u>	<u>Irreversible Commitments</u>	<u>Irretrievable Commitments</u>
All Wilderness	Optimize protection and preservation of public lands in their natural condition.	Wilderness values would be preserved for future generations.	None	Short-term timber harvest potentials would be foregone.
No Action/ No Wilderness	Maintain status quo.	Maintain wood fiber productivity. Maintain livestock forage and wildlife habitat.	None	Loss of soil which would reach rivers in the form of fine sediments. Investment of energy.
Commodity Emphasis	Emphasize production of timber.	Increase wood fiber productivity. Alter wildlife habitat. Decrease visual quality. Increase motorized recreation opportunities.	None	Loss of soil. Potential destruction of cultural sites. Investment of energy. Some wilderness values would be foregone.
Protection Emphasis	Optimize protection and enhancement of natural environment.	Decrease wood fiber productivity. Enhance wildlife habitat. Decrease motorized recreation opportunities. Maintain visual quality. Some wilderness values would be maintained.	None	Loss of soil. Potential destruction of cultural sites. Investment of energy.
Partial Wilderness	Discussions pertinent to All Wilderness alternative apply to those lands so designated, while appropriate discussions from other alternatives would apply to the remaining area.			

¹ As compared to present situation or trend.

CHAPTER 5
CONSULTATION, COORDINATION, AND PUBLIC PARTICIPATION

COORDINATION PRIOR TO THE AMENDMENT AND EIS PREPARATION

Prior to the preparation of this amendment and EIS, the Coeur d' Alene District conducted extensive consultation and coordination with the public during the Management Framework Plan process and the inventory phase of the Bureau's wilderness review program. These early efforts were widely advertised in an attempt to reach the affected publics and establish involved and informed public contacts.

As part of this consultation and coordination process, public workshops were held to identify significant problems and issues to be addressed during the EIS process. These workshops were conducted at Grangeville, Riggins, Lewiston, Elk City, Wallace, Sandpoint, St. Maries, and Coeur d'Alene during 1980.

During this same period of time, meetings were held to gather input concerning the District's wilderness inventory program at Coeur d'Alene, Moscow, Lewiston, Grangeville, and St. Maries. These meetings also identified issues and public concerns.

Prior to the commencement of the amendment and EIS, small group meetings were held with industry representatives, public officials, and public land user interest groups to discuss land use allocations and related topics.

CONSULTATION AND COORDINATION DURING THE PREPARATION OF THE EIS

With the previous public involvement effort as a foundation, the Coeur d'Alene District continued its consultation and coordination efforts as outlined in the MFP Amendment Public Participation Plan. As part of the continuing EIS scoping process, approximately 800 letters were sent to a wide variety of interest groups, agencies, and individuals in March, 1981 to solicit comments, suggestions, and opinions concerning issues to be discussed and analyzed in this amendment and EIS. In addition, a Federal Register notice and news releases were issued requesting that anyone with information pertinent to the amendment/EIS contact the Coeur d'Alene District Office. The input received was used to develop the issues utilized in the preparation of this document. Follow-up letters were sent to all those who responded to requests for information.

During the preparation of this EIS, continuing consultation and coordination took place with U.S. Fish and Wildlife Service to confirm that no threatened or endangered plant species inhabited any WSA and that the few bald eagles, an endangered species, that may winter in the Snowhole Rapids WSA would not be adversely affected by our proposals.

During this period the U.S. Forest Service, Supervisor's Offices in Coeur d'Alene, Grangeville, Orofino, and McCall were frequently contacted to ensure that the alternatives developed for those WSAs which adjoin National Forest lands were compatible with proposed forest plans.

The State Historic Preservation Officer (SHPO) was also consulted during this period to discuss alternatives which could affect cultural sites, particularly in the Crystal Lake and Snowhole Rapids WSAs.

LIST OF PREPARERS

A list of the persons involved in the preparation of this EIS is provided in Table 5-1.

LIST OF AGENCIES AND ORGANIZATIONS SENT THE DRAFT EIS

This list is provided in Table 5-2.

PUBLIC COMMENT

The draft EIS was filed with the Environmental Protection Agency on June 18, 1982 and approximately 650 copies were distributed for public review. The review period ran from June 18 to August 30, 1982. During and following the review period, 86 written comment letters were received.

During this review period, three public meetings were held: July 20 in Grangeville, July 22 in St. Maries, and July 27 in Moscow. On July 29 a formal public hearing was held in Coeur d'Alene. Of the 52 people who attended the public meetings, 25 presented oral comments. Almost all of these commenters submitted written comments also. At the public hearing, 14 people were in attendance with 6 presenting oral testimony. The following is a summary of the comments received at the public meetings and hearing:

Grangeville - There were 12 people in attendance at this meeting. Those who presented oral comments were mainly concerned with the Marshall Mountain and Snowhole Rapids WSAs. A number of speakers stated that they were miners and opposed any attempts to constrain the pursuit of their occupation, especially in the Marshall Mountain area. They indicated that this area is a mining district and should be left alone. Those who spoke favored the No Action (nonsuitable) alternative for Marshall Mountain. One speaker supported the No Action (nonsuitable) alternative for Snowhole Rapids.

St. Maries - This meeting was attended by 13 people, mainly loggers or representatives of timber companies. Those who spoke indicated a strong desire to see the Crystal Lake and Grandmother Mountain WSAs allocated for nonwilderness uses. While supporting our nonsuitable recommendation most opposed any attempts by BLM or the Forest Service to constrain intensive timber management of these areas through scenic area, natural area, or research area allocations.

Two speakers expressed a desire to see more nonmotorized recreation areas developed and one speaker expressed concern about the protection of the Skitswish Monuments in the Crystal Lake WSA without wilderness designation.

Moscow - Twenty-seven people attended this meeting. Most of the people who spoke at this meeting favored wilderness designation for the Crystal Lake and Grandmother Mountain WSAs. They felt that these areas were important since they contained some of the last unspoiled federal lands in an area of intense timber harvesting and associated road construction. A few speakers favored natural and research area designations for these WSAs.

Two speakers represented timber interests and opposed any timber management constraints in the Crystal Lake and Grandmother Mountain WSAs.

Coeur d'Alene (Public hearing) - Six people testified at this hearing. One speaker requested wilderness designation for the Grandmother Mountain WSA. The other five speakers favored no further wilderness designations and no further constraints on timber management for the WSAs.

LETTERS OF COMMENTS AND RESPONSES

Letters of comment were received from 86 agencies, groups, or individuals and have been divided into two groups: those requiring a response and those not requiring a response. Those requiring a response questioned a statement made in the draft document, asked for clarification, or offered new information. These letters and BLM's responses are presented at the end of this chapter.

The pertinent comments within the letters are identified by a vertical line in the left margin of each letter and a comment number corresponding to that letter number. BLM's response to each comment immediately follows each letter.

Letters not requiring a response generally offered opinions about the wilderness issue or BLM's proposals. They did not question the data or analysis contained in the draft document, nor did they offer new information which would necessitate modification of the document.

The letters not requiring response are available for review at the Coeur d'Alene District Office.

The columns in Table 5-2 indicate who sent in a written response to the draft EIS, the number assigned to their letter, the page in this chapter where the letter is printed, and if BLM responded to the letter.

Copies of the EIS are available for public inspection at the following locations:

Bureau of Land Management
Washington Office of Public Affairs
18th and C Street, N.W.
Washington, D.C. 20240
Phone: (202) 343-4151

Bureau of Land Management
Idaho State Office
3380 Americana Terrace
Boise, Idaho 83706

Bureau of Land Management
Coeur d'Alene District Office
1808 North Third
Coeur d'Alene, Idaho 83814

Bureau of Land Management
Cottonwood Area Office
Route 3, Box 181
Cottonwood, Idaho 83522

Table 5-1

LIST OF PREPARERS

This document was prepared utilizing a Core Team approach consistent with CEQ Regulations for implementing the National Environmental Policy Act.

The Core Team, a small group of writers, generated the document using information supplied by the public, BLM resource specialists including a sociologist and economist, and management.

Name	EIS Responsibility	Education	Experience
Ted Graf	Core Team Leader	B. S. Public Administration	4 years BLM, Natural Resource Specialist; 2 years BLM, Writer-Editor; 1 year Private Industry, EIS Technical Coordinator.
Dave Murray	Core Team Technical Coordinator	B. S. Range Management	5 years BLM, Environmental Coordinator; 6 years BLM, Natural Resource Specialist; 4 years BLM, Range Conservationist.
Scott Forsell	Core Team Wilderness Specialist	M. S. Natural Resource Administration; B.S. Park Administration	5 years BLM, Outdoor Recreation Planner.
Kris Long	Core Team Writer-Editor	B. A. Journalistic Communications	2 years BLM, Public Affairs; 2 years BLM, Writer-Editor.
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Wayne Zinne	District Manager; Preferred Alternative Development	B.S. Forestry	1 year BLM, District Manager; 10 years BLM Supervisory Natural Resource Specialist; 5 years BLM, Area Manager; 4 years BLM, Range Conservationist.
Lynn Shelden	Area Manager; Preferred Alternative Development	B. S. Forestry	15 years BLM, Area Manager; 15 years BLM, Forester.
Duane Edverson	Acting Area Manager; Preferred Alternative Development	B. S. Forest Management	20 years BLM, Forester; 2 years USFS, Forester.
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Ron Leedy	Vegetation	B. S. Forest Management	10 years BLM, Silviculturist; 15 years BLM, Forester.
Dick Prather	Timber Management	B. S. Forestry	4 years BLM, Supervisory Forester; 6 years BLM, Forester.
Gus Vitollins	Timber Management	M. F. Forestry	16 years BLM, Staff Forester; 8 years BLM, Forester.
Low Brown	Wildlife	B. S. Wildlife Habitat Management	8 years BLM, Wildlife Biologist.
Vern Webb	Soils	B. S. Agriculture (Soil Science)	14 years BLM, Soils Scientist; 14 years SCS, Soils Scientist.
David Fortier	Air and Water Resources	M. S. Civil Engineering (Water Resource Planning)	2 years BLM, Hydrologist; 1 year Ada/Canyon 208 Area-wide Planning Group; 4 years postgraduate water resources work.
Dan Hutchison	Cultural Resources	B. A. Anthropology	9 years BLM, Archaeologist.
Jim Robbins	Energy & Minerals	E. M. Mining Engineering	10 years BLM, Mining Engineer.
Terry Kincaid	Recreation and Visual Resources	B. S. Park and Recreation; Resources Administration	6 years BLM, Outdoor Recreation Planner.
Dick Todd	Cottonwood Resource Area Coordinator	B. S. Forest Resources	4 years BLM, Forester/Area Environmental Coordinator.
Tom Rinkes	Grazing	B. S. Wildlife Biology	3 years BLM, Range Conservationist.
Craig Johnson	Wildlife	B. S. Wildlife Management Range Management Graduate Work	2 years BLM, Area Biologist; 5 years BLM, Range Conservationist; 1 year FS, Range Technician.
LuVerne Grussing	Recreation and Visual Resources	M. Ed. Recreation and Park Administration; B. A. Recreation	3 years BLM, Outdoor Recreation Planner.
Paul Card	Social Values	Baccalaureate in Sociology and Math	2 years BLM, Sociologist; 2 years Executive Office of the Governor (Idaho); 5 years Idaho Dept. of Transportation.
Stan Frazier	Economics	B. S. Agricultural Economics	6 years BLM, Economist.
Maxine Hulick	Word Processing	Associate Arts Degree, 3 years Business undergraduate	3 years BLM, Editorial Clerk.
Keo Brighton	Word Processing	B. A. Sociology	1 year BLM, Editorial Clerk; 2 years IRS, Legal Documents Clerk.
Patty Hardin	Word Processing	Business Secretarial Degree	3 years BLM, Editorial Clerk; 1 year USFS, Clerk Typist.

TABLE 5-2
AGENCIES, ORGANIZATIONS, AND PERSONS SENT THE DRAFT EIS

	Provided a Written Response	No. Assigned to Letter	Page Where Letter is Printed	BLM Response Provided
<u>FEDERAL GOVERNMENT</u>				
Senator James A. McClure				
Senator Steven D. Symms				
Representative Larry E. Craig				
Representative George Hansen				
National Advisory Council on Historic Preservation				
Department of Agriculture				
Forest Service				
Soil Conservation Service				
U. S. Attorney				
Federal Energy Regulatory Commission				
Federal Highway Administration	*	13		
Rural Electrification Administration				
Federal Aviation Administration	*	85		
Department of the Interior				
Bureau of Indian Affairs	*	3	5-15	*
Bureau of Mines				
Bureau of Reclamation				
National Park Service	*	60	5-33	*
U. S. Fish and Wildlife Service				
U. S. Geological Survey				
Environmental Protection Agency				
U. S. Army Corps of Engineers				
<u>STATE GOVERNMENT</u>				
Idaho Bureau of Mines and Geology				
Idaho Fish and Game Department	*	67	5-37	*
Idaho Department of Water Resources				
Idaho Department of Lands	*	5		
Idaho Department of Transportation				
Idaho Outfitters and Guide Board				
Idaho State Clearing House				
Idaho State Historic Preservation Officer				
Idaho National Guard	*	86		
Governor John V. Evans				
Lieutenant Governor Philip E. Batt				
Secretary of State Pete T. Cenarrusa				
Attorney General David H. Leroy				
Senator Kermit V. Kiebert				
Senator William E. (Bill) Moore				
Senator Terry Sverdsten				

	Provided a Written Response	No. Assigned to Letter	Page Where Letter is Printed	BLM Response Provided
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STATE GOVERNMENT CONT.

Senator Vernon T. Lannen				
Senator Norma Dobler				
Senator Mike P. Mitchell				
Senator Lester V. Clemm				
Senator Ronald J. Beitelspacher				
Senator David Little				
Representative Marion Davidson				
Representative James F. Stolcheff				
Representative Morgan Minger				
Representative E. Cameron Fullmer				
Representative Robert M. (Bob) Scates				
Representative Emery E. Hedlund				
Representative B. E. (Bud) Lewis				
Representative Louis J. Horvath, Jr.				
Representative William F. Lytle				
Representative Tom Boyd				
Representative James Lucas				
Representative George F. Johnson				
Representative Paul C. Keeton				
Representative Carl P. Braun				
Representative Marguerite P. McLaughlin				
Representative Harold W. Reid				
Representative Richard L. Adams				
Representative Jim S. Higgins				

LOCAL GOVERNMENT

Panhandle Area Council				
Clearwater Economic Development Association				
Benewah County Joint City/Council Planning Commission				
Juliaetta Planning Commission				
Moscow Planning and Zoning Commission				
Post Falls Planning and Zoning Commission				
Rathdrum Planning and Zoning Commission				
Bonner County Planning and Zoning Commission				
Priest River Planning and Zoning Commission				
Clearwater County Planning and Zoning Commission				
Orofino Planning Commission				
Idaho County Planning Commission				
Cottonwood Planning and Zoning Commission				
Kootenai County Planning and Zoning Commission				
Dalton Gardens Planning and Zoning Commission				

	Provided a Written Response	No. Assigned to Letter	Page Where Letter is Printed	BLM Response Provided
<u>LOCAL GOVERNMENT CONT.</u>				
Smelerville Planning and Zoning Commission				
Wallace Planning and Zoning Commission				
McCall Planning and Zoning Commission				
Hayden Lake Planning Committee				
Kamiah Planning and Zoning Commission				
Winchester Planning and Zoning Commission				
Nez Perce County Planning and Zoning Commission				
Potlatch Planning and Zoning Commission				
Lemhi County Planning and Zoning Commission				
Salmon Planning Commission				
Lewis County Planning and Zoning Commission				
Craigmont Planning and Zoning Commission				
Spirit Lake Planning and Zoning Commission				
Latah County Planning and Zoning Commission				
Lapwai Planning and Zoning Commission				
Lewiston Planning and Zoning Commission				
Shoshone County Planning and Zoning Commission				
Kellogg Planning and Zoning Commission				
Mullan Planning and Zoning Commission				
Coeur d'Alene Planning and Zoning Commission				
Pinehurst Planning and Zoning Commission				
Fernan Lake Planning and Zoning Commission				
Hauser Planning and Zoning Commission				
Hayden Citizen Advisory Committee				
Adams County Commissioners				
Benewah County Commissioners				
Borners County Commissioners				
Boundary County Commissioners				
Clearwater County Commissioners				
Idaho County Commissioners				
Kootenai County Commissioners				
Latah County Commissioners				
Lewis County Commissioners				
Nez Perce County Commissioners				
Shoshone County Commissioners				
Deary Zoning Commission				
Genesee Flaming and Zoning Commission				

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<u>ORGANIZATIONS</u>				
Burlington Northern Inc.	*	59	5-31	*
Channel Lumber Co.				
Diamond International				
Evergreen Forest Products				
Potlatch Corporation	*	40	5-40	*
Northwest Pine Association				
Idaho Cedar				
Idaho Veneer Company				
Inland Forest Resource Council				
Kamiah Mills				
Louisiana-Pacific Corporation				
North Idaho Forestry Association				
Scott Paper Company				
W-I Forest Products				
Western Forest Industries Association				
Rocky Mountain Oil and Gas Association				
Royal Apex Silver, Inc.				
Conoco, Inc.				
American Mining Congress				
Anaconda Copper Company				
ASARCO Incorporated				
Atlantic Richfield Co.				
Callahan Mining Corp.				
Canyon Silver Mines, Inc.				
Coeur d'Alene Mines Corp.				
Cominco American Inc.				
Golconda Mining Corp.				
The Bunker Hill Company				
GRC Exploration Co.				
Idaho Mining Association				
Morbeck Mining Co.				
Northwest Mining Association				
Pocatello Trail Machine Association, Inc.				
Bonner County Historical Society				
Texaco Inc.				
Union Oil Company of California				
Meridian Land and Mineral Company				
Coeur d'Alene Wildlife Federation				
Idaho Wildlife Federation				
Inland Empire Big Game Council				
The Wildlife Society				
The Committee for Idaho's High Desert	*	83		
Friends of the Earth				
Greater Snake River Land Use Congress				
Hell's Canyon Preservation Council				
The Institute of Ecology				
National Council of Public Land Users				
Sierra Club				

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Kootenai Environmental Alliance	*	84		
Idaho Gem Club				
Idaho State Rifle and Pistol Association				
North Idaho Mineral Club				
Northwest Power Boaters				
Salmon River R. D.				
Shoshone Council Camp Fire				
American Wilderness Alliance				
Idaho Archaeological Society				
Idaho State Historical Society				
Nez Perce Economic and Community Development				
The Wilderness Society				
Idaho County Cowbelles				
ARFA				
Citizens Utilities Co.				
Spokane "Hobnailer"				
Pacific Power and Light Company				
Citizens for Environmental Quality				
Boise State University				
University of Idaho				
University of Montana				
Washington State University				
Northern Idaho Chambers of Commerce				
Northern Idaho Public Libraries				
Northern Idaho News Media				
Natural Resources Defense Council				
Nez Perce Tribal Executive Council	*	61	5-34	*
Coeur d'Alene Tribal Council				
Idaho Environmental Council	*	2	5-13	*
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St. Maries Chamber of Commerce	*	51		
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Barnes, Inc.	*	68		
Walter Scotts, Inc.	*	70		
Wildlife Resources, Inc.	*	74		
V. David Welch Assoc.	*	78	5-39	*

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George and Anita Davis	*	4	5-16	*
Don L. Crawford	*	6	5-17	*
Kenneth M. Goldsmith	*	7		
Dan Cook	*	8		
Terry Eckwright	*	9		

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R. M. Gormley	*	12		
Cynthia M. Glassford	*	14		
Steven W. Koehler	*	15	5-19	*
James Gehring	*	16		
LeRoy Shaw	*	17	5-20	*
Dennis Lightfield	*	19		
Lynn C. Norris	*	20	5-23	*
Charles A. Wellner	*	21		
Karen Buxton	*	22		
Murray A. Gibas	*	23		
Eric L. Jensen	*	24		
Paul Chandler	*	25		
Bob Kulp	*	26		
Mary Kirkwood	*	27		
Forest D. Kreisher	*	28		
James A. Bull	*	29		
Cheryl Kolbeck	*	30		
William A. Warren	*	31		
Bill Cord	*	32	5-24	*
Henry J. Fabian	*	33		
Fred W. Rabe	*	34		
Donald R. Johnson	*	35		
J. B. Sowell	*	36		
Craig D. Rabe	*	38		
Jerry Wegman	*	39		
E. L. Williams	*	41		
Margaret Dibble	*	42		
Bernard Romain	*	43		
David A. Kudrna	*	44		
R. C. Hackett	*	45		
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Caroline A. Bailey	*	81		
Meg Weesner	*	82		

LETTERS WITH RESPONSES

Idaho Environmental Council

P.O. Box 1708
Idaho Falls, Idaho 83401

28 June 1982

Ted Graf, BLM
1808 North 3rd Street
Coeur d'Alene, ID 83814

NORTH IDAHO WILDERNESS DRAFT EIS COMMENTS

Dear Mr. Graf:

On behalf of IEC, I wish to comment on the North Idaho Wilderness EIS, but before I do that, I trust that the final EIS will eliminate an error on page 1-3 of the draft. An area cannot be allocated "for multiple use" as opposed to Wilderness, for they are one and the same, both in law as well as in reality. Wilderness is merely one form of multiple use, and is in fact often more "multiple" than many of the timber operations seen on public land. In any event, what is at issue here is not in any way wilderness vs. multiple use, and this unfortunate turn of phrase needs elimination from this page.

I wish to object most strongly to two of your recommendations--that for Snowhole Rapids and especially, that for Grandmother Mountain.

In the case of Snowhole, it is unclear why, on page 1-3, a conclusion is reached that this area would be unmanageable as wilderness. There is no doubt at all that it is suitable, and there is equally no doubt that the public would strongly oppose road building or any form of change in this stretch of the lower Salmon. The Cottonwood office of BLM maintains a fine river patrol on the lower Salmon, and when Wild River classification finally comes to this reach of the river, it will have to enforce that particular law. At the least, the final EIS must include details on just why this acreage cannot be managed as Wilderness. It has always looked wild to me on my trips with John Barker in the area and I doubt that much money or effort would be needed to "manage" it as it now is.

It is in the case of Grandmother, however, that your arguments are weakest of all. They omit any discussion of the great rarity of the values now present there. The BLM staff has, I know, looked many times from this area on the misery and destruction painfully visible on nearby USFS and private land. Grandmother Mtn. is a tiny little remnant in a vast sea of plunder and pillage, and puny remnant of natural values long eliminated on adjacent holdings. It is a rare and valuable place, attributes only mentioned in passing in the EIS. It is also popular as it now is. Your estimate of 2500 visitor days is far too low. As many people as that drive by its every year on the Freezeout Road, looking to the left at its treasures after buzzing for miles through the destruction caused by other land owners.

While ONA designation for at least part of it appears to offer respite from the bulldozer, the history of the BLM and other federal agencies in offering permanent protection administratively to such areas is a dark one, not designed to offer much hope for the future. Someone, somewhere, always has a plan in hand to do something to such places. While Administrator A may in fact say NO to such people, what of Administrator B, or C, let alone X, Y, AND Z. It is no surprise that Potlatch and other firms often favor this type of "protection" instead of Wilderness--they made much of their money in the toilet paper business, and kind of paper about as flimsy and permanent as ONA designation. In fact, only fools and the hopelessly naïve would have any faith at all in this scheme, especially when the foxes back in Washington have already opened the door of the hen house. James Watt administratively "protecting" any place? You've got to be kidding?

2.1

2.5

There are also some real problems with the alternatives developed for Grandmother Mountain. None offers any protection at all for the popular trail system that runs to the top of both Grandmother and Grandfather Mountains. Even if this quite high country were to erroneously (as you propose) be allocated to timber harvest, something at least ought to be done to keep loggers and roads off this trail system, or even from crossing it. By allocating this whole ridge, rather than just its west slopes, to development, you are needlessly assaulting the finest single and most popular feature of the west end of the roadless area--its trail system. At the least, the boundary of the area not recommended for Wilderness (or to the miserable ONA status being proposed) ought to be downslope from the ridge line. The current proposal invites stronger opposition that might otherwise be expected in its useless and gratuitous attack on this trail system.

2.6

The EA is also defective in that it contains no economic analysis at all. Since I have seen such analyses in other BLM documents, I am confident not only that the agency has heard of such a thing, but has even proven itself able to complete one. Since trees are somewhat scarce in the Grandmother Mtn. area, but primitive values there represent an extremely rare commodity, a scholarly economic analysis that fully considered irreversibly changing and eliminating scarce resources would prove interesting. I am sure that the final EIS will include one, as is required by law.

2.2

2.7

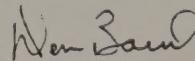
The decision concerning Grandmother Mtn. is also an error in yet another way. It appears that the authors of the document believe that there is other wilderness geographically close at hand. Where? Grandmother Mtn. is only 1½-2 hours from its numerous users in Lewiston, Moscow, Pullman and St. Maries. Up the east lies a maybe wilderness along the St. Joe-Clearwater Divide, but it takes 5-7 hours of hard and expensive driving to reach that area, and the USFS is of course already hard at work reducing their pitiful recommendations there. The facts are just the opposite. Unless you have a timber company helicopter to fly around in, this would be the closest wilderness of all to much of North Idaho and would offer a rare and popular resource to a populace devoid of the same. Your logic in not recommending this area for Wilderness is sad and specious and makes about as much sense as calling rain sunshine.

2.3

In short, this EIS is a flawed document unwisely recommending that the citizens trust the Interior Department to do what is best. I trust them all right--trust them to pander to corporate greed and probably to even offer the whole of BLM land in north Idaho to private companies, or worse, to the Forest Service. What a wretched fate that would be for these little wild jewels.

2.4

Sincerely,


Dennis Baird
Director, IEC
P.O. Box 8787
Moscow, ID 83843

Response to Letter No. 2

- 2.1 Text has been changed.
- 2.2 Although this area possesses wilderness characteristics and its ecosystem is currently not represented in the National Wilderness Preservation System, management of this WSA as a wilderness is not readily achievable. The continuing trend of increased use of this area may lead to a situation where solitude would only be possible during times of low use unless management intervened to limit access to this unit. This would be very difficult since a navigable river flows the full length of this WSA. In addition, the use of motorized jet boats in this WSA is an historic and continuing use which does not complement a wilderness-type experience.
- 2.3 Information in Chapters 2, 3, 4, and Appendix 1 recognizes the rare values of the WSA.
- 2.4 Recent data (1984) indicates that this WSA receives about 9,350 annual visitor days of recreation use.

- 2.5 The majority of trails in this WSA lie within the proposed ONA and RNA areas. The proposed boundary between the ONA and the timber management area is west of the Marble Creek trail, thereby including it within the ONA.

We regard the trail system in this WSA to be quite valuable for recreational use. Should timber management activities be prescribed for the western portion of the WSA, appropriate consideration of these values would be made through site specific environmental assessments.

- 2.6 Discussions of economic impacts are found in Chapter 4 (Chapter 6 of draft EIS) for each WSA. The economic analysis of each WSA found that there were no significant impacts associated with any of the alternatives.
- 2.7 Using the established criteria for "nearness to population centers", there currently exists 16 designated wilderness areas encompassing 5.9 million acres of land within a day's drive of the Moscow-Pullman area. These include the Selway Bitterroot, Gospel Hump, Hells Canyon and other wilderness areas.

UNITED STATES GOVERNMENT
memorandum

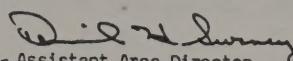
DATE: JUN 25 1982
REPLY TO: Branch of Land Services - Portland Area Office
SUBJECT: Review of North Idaho MFP Amendment and Environmental Impact Statement Draft
TO: Bureau of Land Management, Coeur d'Alene, Idaho
 Attention: Ted Graf

As requested we have reviewed the subject statement and offer the following comment:

5-15

3.1

We recommend direct consultation with representatives of the Nez Perce and Coeur d'Alene Tribes of Indians and the Bureau of Indian Affairs at the Northern Idaho Agency for information on cultural use of the lands under consideration. Wilderness designation of lands and water support the intent of the American Indian Religious Freedom Act of 1978 (P.L. 95-341) in that additional protection to the natural environment occurs. The subject plan should contain information on consultation with tribal representatives to determine application of the Religious Freedom Act to the proposed action.


 Acting Assistant Area Director
 (Economic Development)

cc: Superintendent, Northern Idaho Agency
 Environmental Quality, Code 204
 Chairman, Nez Perce Tribal Executive Committee
 Chairman, Coeur d'Alene Tribal Council
 Ted Graf, N. ID. MFP Amendment EIS Team Leader

Response to letter No. 3

3.1 Consultation and coordination with these tribes will continue.

Letter to Wayne Zinne

-2-

June 30, 1982

Rural Route
 Clark's Road
 Essex, New York 12936
 June 30, 1982

Wayne Zinne, District Manager
 Bureau of Land Management, USDI
 1808 North 3rd Street
 Coeur d'Alene, Idaho 83814

Dear Wayne:

We have reviewed the draft "North Idaho MFP Amendment and Environmental Impact Statement."

As you know, we are personally familiar with the Selkirk Crest, Crystal Lake, Grandmother Mountain and Snowhole Rapids WSAs. We are not familiar with the Marshall Mountain WSA and will not comment on it. Our comments on your preferred alternatives for the four areas we are familiar with follow:

Selkirk Crest

We support your recommendation for wilderness designation (alternative 1) and sincerely hope the Forest Service sees fit to follow through with a wilderness recommendation on the remainder of Long Canyon.

Crystal Lake and Grandmother Mountain

We believe all of the Crystal Lake WSA and the eastern two-thirds of the Grandmother Mountain WSA should be recommended for wilderness designation. In other words, we prefer alternative 1 for Crystal Lake and alternative 4 for Grandmother Mountain. We can find no physical or biological resource justification for recommending otherwise whereas the case for such designations could be made very strongly - particularly if the Forest Service would reconsider its non-wilderness recommendation for upper Marble Creek at some future time. The reasons for your preferred alternatives must, therefore, be strictly political. We can accept your compromise providing the ONAs and the RNA are not further compromised.

Snowhole Rapids

We are troubled by your recommendation here for three primary reasons. First, it contradicts the recommendation of your BLM advisory board. Second, and more important, we desperately need the Palouse Province: Wheatgrass-Bluegrass ecosystem represented in the National Wilderness Preservation System. Recently the Forest Service



dropped further wilderness consideration of the only candidates they had in this ecosystem. And third, river corridor wilderness designations will provide future generations with a particularly unique educational, scientific and recreational resource. Although we recognize the management challenges it might create for you, we urge you to reconsider and support alternative 1, wilderness designation for Snowhole Rapids.

Even though just last week we asked to be removed from the District's mailing list (!) would you be sure we get this final EIS.

We've only been here 10 days and greatly miss Coeur d'Alene but we are in a beautiful corner of the world and look forward to getting settled in. Hope all's well with you and your family.

Best personal regards,

Anita

Anita L. Davis
 Former BLM Advisory Board Member

George

George D. Davis
 Land Use Consultant

cc: Clair M. Whitlock

Response to Letter No. 4

4.1 Please refer to Appendix 1 for a summary of the rationale upon which the nonsuitable recommendation for the Snowhole Rapids WSA was based.

Ted Graf

Bureau of Land Management
1808 N. 3rd St.

Coeur d'Alene, Idaho 83814

7-14-1982

Dear Mr. Graf:

I will not be able to attend the Moscow, id., hearing on the DEIS North Idaho wilderness study. I am, therefore, submitting my comments in writing and ask that they be included in the public record and addressed in the final EIS.

I wish to discuss three areas specifically, the Selkirk Crest, Crystal Mountain and Grandmother Mountain. I support your wilderness recommendation for the Selkirk Crest (720 acres). However, I believe your recommendations for Crystal Mtn and Lake (9027 acres) and Grandmother Mtn. (17,129 acres) are inadequate to protect those areas.

You have recognized the outstanding nature of Crystal Mtn. by recommending the entire area as an ONA (Outstanding Natural Area) closed to all motor vehicles. I support the motor closure and protection of the entire area. But, ONA is inadequate - it is an administrative protection that can disappear when BLM changes its attitude. Statutory protection as wilderness should be given Crystal Mtn. ONA designation recognizes the wilderness quality; so, don't use it as a cop-out to political pressure from your boss - Mr. Watt!

There are major problems with your inadequate recommendation for Grandmother Mtn, although there are some good points as well. I fully support your recommendation for a 2905 acre research natural area. I have been to this high elevation

marsh area and feel that it will be an excellent site for scientific studies. Now for the problems. Your ONA recommendation is an "administrative" protection is not sufficient to protect the wilderness values of Grandmother Mtn. This area should be wilderness and closed to motorized vehicles. There is already too much damage to this fragile area caused by overuse by ORV's, etc. Second, the line you have drawn between the ONA and the area to be roaded and logged is poorly conceived. It leaves the summit of both Grandmother and Grandfather Mtns, including the trail from here to Freezout Saddle out of the protected area. This recommendation is absolutely wrong. The ONA should, therefore, be enlarged to the west and its recommendation changed to "wilderness". Finally, you mention upper ~~the~~ Marble creek only in passing, although it is a vital component of the Grandmother Mtn Wilderness. This past weekend I hiked the Marble creek trail and found it a quiet, wilderness experience from the bridge across the creek upstream. The creek runs clear and cold even in spring. You state in the Draft EIS that this area (administered by the Forest Service) must be managed appropriately if the integrity of the ONA is to be maintained. Yet, you do not detail what appropriate management practices must be used, and you do not discuss any arrangements which have been made or discussed with the Forest Service. The final EIS must state clearly that the Forest Service will include the roadless section of Marble creek within the protected area (and I mean from the bridge upstream). A gentleman's agreement with the Forest Supervisor which is not

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6.2

Response to Letter No. 6

even mentioned in the Draft EIS is not sufficient. Gentlemen's agreements last about as long as the stay of a District Ranger or Supervisor. You must resolve this very important question in writing in the final EIS.

Without the changes discussed above, I cannot support your recommendations for ONA designation. I urge you to reconsider your short-sighted choice of administrative protection (inadequate in boundaries for Grandmother Mtn.) when both areas are clearly deserving of wilderness designation. I have found Grandmother Mtn., in particular, to be an area rich in fisheries, clean water and wildlife. It's that way because it is wilderness surrounded by networks of roads and timber harvest. It deserves statutory protection if it is to stay that way, and environmentally minded conservationists such as I will continue to push for Congressional action to designate an adequately large Grandmother Mtn. wilderness.

Sincerely,

Don L. Crawford
825 Camas
Moscow, Idaho 83843

6.1 Please see response 2.5.

6.2 The BLM and Forest Service coordinate land use plans wherever possible. This EIS does not contain details of the Forest Service land use plan for this area since that draft plan is still in the public comment stage.

PLEASE IDENTIFY ANY SPECIFIC UNITS THAT YOU MAY BE COMMENTING ON.

NAME Steven W. Koehler

ADDRESS P. O. Box 41

Grangeville, Idaho 83530



Below are my comments on the draft North Idaho Plan Amendment/EIS for five wilderness study areas in the Coeur d'Alene District.

These comments are directed at the draft of the North Idaho MFP Amendment & Environmental Impact Statement put out by the USDI-BLM, Coeur d' Alene District and dated 1982.

My comments are about the Marshall Mountain Area only.

In general, a large amount of readily available information about this area has not been utilized in evaluating this WSA.

The section titled Naturalness on page 5-9 is an example of what I am talking about. This section states that the Marshall Mountain area appears to be in essentially natural condition and that mine adits have been found in sections 18 and 22. By merely looking at the U. S. Geological Survey's topographic map of the Burgdorf Quadrangle you would see that such statements are grossly absurd. This map shows there are mine workings in sections 8, 9, 17, 20, 21, 28, 29, and 34. In addition the map shows there are 30 buildings and 20 miles of roads in this WSA.

The Naturalness section also states that there has been extensive prospecting in the area, however, most prospecting involved small test holes. In reality there has been mining in this area (as opposed to just prospecting). If you need a reference on this matter you should consult: Lorain, S.H., 1938, Gold mining and milling in Idaho County, Idaho: U. S. Bureau of Mines Information Circular 7039, 90 p. The Golden Anchor was an important mine in this area and is the subject of another government report: Lorain, S. H. and Davis, W. Buford, 1938, Mining and milling methods and costs of the Golden Anchor Mining Co., Burgdorf, Idaho: U. S. Bureau of Mines Information Circular 7024, 15 p.

In the Primitive and Unconfined Recreation section on page 5-10 it states that recreational opportunities include hiking, backpacking, hunting, wildlife observation, photography, and sightseeing and that the diversity of these activities is considered outstanding. I admit that you can do these activities in this WSA but they certainly are not outstanding. These kind of activities can be carried on just about anywhere in Idaho County. Again, by simply looking at the Burgdorf Quadrangle topographic map and airphotos of this area you could see that much of this area has 30 - 40 percent slopes which are not very conducive to your stated activities. There is about 5 miles worth of trails in the entire area (not counting roads) and these trails are nowhere near streams where one could get drinking water. Dense vegetation along streams does not make them desirable places to go hiking.

With regard to Special Features on page 5-10 I question if anadromous fish migrate up the streams into the WSA. Do they?

With regard to the management alternatives on pages 3-18 and 3-19 there is nothing mentioned about mining or mineral potential in any of the 6 alternatives. The obvious lack of consideration for mining as a use of public lands has contributed greatly to the faulty analysis of this draft EIS. The section on Energy and Mineral Resources on page 4-24 is very inadequate. There is nothing mentioned about Marshall Mountain being cont.

Steven W. Koehler
P. O. Box 41
Grangeville, Idaho 83530
Page 2

a recognized mining district as indicated in Idaho County courthouse records or U.S.B.M. Inf. Cir. 7039 mentioned on page 1. There is nothing mentioned about Marshall Mountain mining district being on the Florence - Stibnite mineral belt, the largest mineral belt in north-central Idaho (Reference: Green, William R., 1972, Delineation of Mineral Belts of Northern and Central Idaho: Idaho Bureau of Mines and Geology Information Circular No. 22, 8 p.). In addition there are many unpatented and numerous patented mining claims in this WSA. A map showing the location of the privately held ground in the WSA would be helpful in your analysis of this area and such a map is already available from the BLM office in Boise. Also the computer printout of the unpatented mining claims in the WSA (also available from the BLM in Boise) would give you some idea of the extent of mineralization in the area. In addition to base metals, gold, and silver, the mineral scheelite (an ore of tungsten) has been found in the WSA. I think by stating the minerals (and the ores they represent) that occur in the study area and listing the number of claims that occur in each section of the WSA would help put the mineral resources of this area in proper perspective. Such information represents simple hard facts without any speculation or complicated calculations or formulas.

In summary, I feel that you would have a more thorough and better quality EIS of this WSA if you used readily available published information in your report.



511

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15.2

15.3

Response to Letter No. 15

- 15.1 The mine workings in sections 8, 9, 17, 20, 21, 28, 29, and 34 including associated buildings and roads are not within the boundaries of the WSA. These areas were dropped from WSA consideration in 1980. The intensive inventory makes the following statements regarding naturalness:

"There are three places in the roadless area that have had major impacts on naturalness and have been deleted from the inventory. One that contains 14 acres was deleted due to recently expanded mining activities on Bear Creek. Another area of 781 acres was deleted because the cumulative impacts of mining activities were judged to significantly impact the area's naturalness. The impacts include three mining camps, mine-associated machinery, tailings piles, and two access routes cut into the mountain side that obviously are the result of man's activities in the area. Neither access route meets the Bureau's "road" definition, but they are impacts on naturalness that would not be overlooked. Almost half of the deleted area overlooks the Kimberly, Golden Anchor, and Sherman Howe mines. While these mines lie outside the roadless area, they significantly impact naturalness when viewed from within the area.

A third area of 171 acres was deleted in the southeastern corner of the roadless area because of the cumulative impact of mining activities on the area's naturalness. Mining impacts include the Tuttle mining operations, several mine shafts, tailings piles, buildings, and abandoned roads. There is a substantial imprint of man's work on the deleted area."

- 15.2 Our field investigations indicate that steep gradients, low flows, and migration barriers currently prevent fish migration into the WSA.
- 15.3 The Amendment/EIS recognizes the importance and historic use of this area for mining. The preferred alternative will not adversely affect this use.

5-20

Gentlemen:

I am responding to your Environmental Impact Statement on WSA Study Area Unit #62-1 Snowhole Rapids and #62-10 Marshall Mountain. Let me address each area individually.

Snowhole Rapids. I agree with the BLM recommendation of a recreational designation. In view of the fact of current and future whitewater rafting and powerboating opportunities on the Lower Salmon and the need for moderate motorized vehicle use, I feel that any type of wilderness designation will have a adverse effect on the economic and social well being of the area. Also to be considered is the fact that even with the most liberal restrictions on the river area, the use of motorized vehicles except on the river itself will always be very limited because of the lack of roads and potentials for the same.

Rafting companies by nature are very interested in the wilderness aspect of the river. While being realistic, I do not feel the use of powerboats have any real adverse effect on the semi-wilderness experience and they can be a real asset in case of an emergency. Again I agree that this area should be managed for recreation.

Marshall Mountain. I disagree with the recommendation to manage this area for recreation and recommend the alternative of either mining or multiple use.

This area has been an established mining district for many years and by all means should remain so. Several individuals and small mining companies have established claims in this area which employs several people. Also there are numerous other mines in the same area which also help the economic and social stability of the surrounding towns. Having lived in the Riggins area all my life, I am very much aware of the importance of a realistic management plan and the tremendous effect a misdesignated or mismanaged plan can have on a small town such as Riggins.

As a designated mining area the timber industry would also have more opportunities as well as livestock grazing while there are still many recreational opportunities with fishing in the lakes and hunting of which neither mining nor logging has any tremendous effect upon.

17.1

Response to letter No. 17

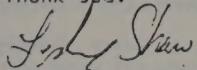
17.1 Please refer to response 15.3.

As stated on page 1-3 of the Impact Draft, this area is not suitable for a wilderness designation. We feel that the recreational opportunities in this area are somewhat limited and would not be adversely effected with a plan designed to accommodate mining and logging.

In closing, may I commend you on your realistic approach to these areas. Just because an area is to be studied does not mean it should be a wilderness. In these times as I'm sure you're very much aware of, we need to be very careful not to cut our throat for the sake of one more wilderness area. There are many resources to be considered besides solitude.

In Riggins with the sawmill burnt down and maybe not economically feasible to rebuild and the economy in general so poor there are very few other jobs in the area, I feel any area which has a proven resource with economic value should be carefully considered or we may find we can't even afford to enjoy the wilderness we have.

Thank you.



LeRoy Shaw

"Working for environmental quality and economic security"
St. Maries, Idaho 83861



P.O. Box 163
St. Maries, ID 83861

Response to letter No. 18

- 18.1 Outstanding Natural Area and Research Natural Area designations are legitimate land use allocations. The BLM does not consider management under these designations as defacto wilderness management. Early land use plans for these areas, prepared prior to any wilderness inventories, recommended protective status for these units.
- 18.2 With the exception of one parcel of private land which is totally surrounded by federal land, management activities on BLM lands within the WSAs should not adversely affect activities on private lands. Wherever practical, BLM and the USFS strive to coordinate their land use plans. It is anticipated that the plans for the subject areas will be compatible.

July 27, 1982

Mr. Ted Graf
North Idaho MFP Amendment EIS Team Leader
Bureau of Land Management
1808 North 3rd Street
Coeur d' Alene, ID 83814

Subject: BLM Wilderness Study Areas

Grandmother Mountain - 17,129 Acres
Crystal Peak - 9,027 Acres

Dear Mr. Graf:

The Board of Directors of the St. Joe Valley Association, meeting on July 27 with quorum present, unanimously oppose the BLM preferred alternatives.

The Association, believing that "environmental quality is possible with economic security" supports the timber alternative in both areas. We are of the opinion that the ability to administratively create "Outstanding Natural Areas" and "Research Natural Areas", thereby avoiding the legitimate process of creating wilderness, is an abuse of authority by the BLM.

18.1

The creation of further wilderness in Idaho, either defacto or congressionally mandated, is unacceptable to the St. Joe Valley Association and the people it represents. The Association will openly oppose any effort to further lock-up our public timber in this area.

18.2

Additionally, what about private land involved in the area, and will the area be enlarged to include U.S.F.S. Land? If so, we would be strongly opposed to such action on the part of the U.S.F.S.

For the Board of Directors of the St. Joe Valley Association

Don Green

Don Green
President

cc: Senator Symms
Senator McClure
B.I.I.
Diamond International

Potlatch Corp.	Harold Wadley
----------------	---------------

5-22

PLEASE IDENTIFY ANY SPECIFIC UNITS THAT YOU MAY BE COMMENTING ON.

NAME Lynn C. Norris
 ADDRESS Univ. of Idaho Library
Moscow, ID 83843

Below are my comments on the draft North Idaho Plan Amendment/EIS for five wilderness study areas in the Coeur d'Alene District.

Grandmother

All 17,000 acres should be recommended for wilderness. Marble Creek and environs have already been wrecked too much. The little remnant that is left now should be permanently kept as it is. Your CNA area is too small and offers no permanency. This whole area has some nice trails and other recreational features that deserve protection.

5-23

Crystal Lake

A good proposal, but should also be wilderness. Why put places like this under the continuous jeopardy of administrative whim.

Selkirks

A fine idea. Ralph Kizer needs this kind of heat. It will build some character in him.

Marshall Mtn.

A good plan. Too many miners here to do much else.

Snowhole

There is not a single resource conflict in this area and therefore no reason why it should not be wilderness. There are also periodic plans to put a dam on the lower Salmon and wilderness classification might at least slow up such insanity.

20.1

Response to letter No. 20

20.1 Resource conflicts exist in this area mainly involving motorized vs nonmotorized recreation. Wilderness designation would not resolve these conflicts since both types of recreation are accepted historic uses and would continue. The continuing trend of increased use of this WSA may lead to a situation where solitude would only be possible during times of low use unless management intervened to limit access. Such management intervention would be very difficult to implement. Management of this WSA as wilderness is not readily achievable.

PLEASE IDENTIFY ANY SPECIFIC UNITS THAT YOU MAY BE COMMENTING ON.

NAME BILL JESCO
 ADDRESS 913 CENTER
ST. V'ZIAZ
10410

Response to letter No. 32

32.1 Please refer to response 2.6.

Below are my comments on the draft North Idaho Plan Amendment/EIS for five wilderness study areas in the Coeur d'Alene District.

CRYSTAL LAKE
 SAWTOOTH MOUNTAINS -

32.1 YOUR E.I.S. DID NOT LIST ECONOMIC /
 SOCIAL VALUES OF RECREATIONAL AREAS
 WHICH I BELIEVE ARE CONSIDERABLE
 AND OFFSET THE LOSS OF 2500 ACRES
 OF "PRODUCTIVE" LAND TO TIMBER HARVEST-
 IF GOOD PLACED ANALYSIS -

THANKS -

I SUPPORT THE ONA / BNA ALLOCATIONS

THESE



August 2, 1982

Bureau of Land Management
1808 North Third Street
Coeur d'Alene, Idaho 83814

Gentlemen:

I appreciate the opportunity to provide input to your public comment on the Draft EIS. My comments pertain to the Marshall Mountain section.

First, your EIS statement ignores the fact that the Marshall Lake Mining District was not included in the Forest Service Lands set aside for National Forests when the Forest Service was created. The Marshall Mountain lands would not even be under the control of the BLM if it was not a mining district at the inception of the Forest Service.

When you attempt to establish the appropriate use for these lands for planning purposes, why not keep it as a MINING DISTRICT and let miners do their thing?

37.1 The Marshall Mountain lands do not qualify as a Wilderness Study area. Qualification criteria states that WSA lands must be areas where man has been a visitor and not a permanent resident. The Marshall Lake Mining District has had large numbers of permanent inhabitants from its discovery (late 1890s) until the 1950s when the price of gold became low relative to the cost of mining it. Even then, the Johnsons were permanent residents at Bear Lake for four years in the 1970s.

37.2 I highly recommend your "do nothing" option and that the BLM leave the area for mining purposes! It is an area that has already always been a mining area and has proven deposits of gold, silver, and scheelite and potential deposits of zirconium and stibnite.



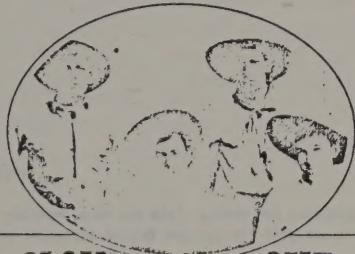
All that is needed is for the price of gold to go to \$1,000 per ounce and the district would become very active. I would think the BLM would prefer to avoid all the potential conflicts with the public and miners by managing the area for mining.

Sincerely,

Gerald P. Kooyer

Gerald P. Kooyer
General Partner

GPK/lb



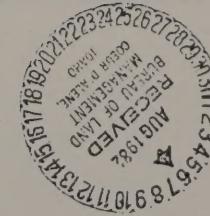
26011 Taft Lane
San Marcos, Calif. 94075

Potlatch

Response to letter No. 37

37.1 Areas with evidence of extensive mining activities, such as the dwellings, roads, etc. in the Bear Lake area, were excluded from the WSA. Please see response 15.1.

37.2 Please see response 15.3.



Potlatch Corporation
Wood Products Western Division

Northern Units Logging
PO Box 386
St. Maries, Idaho 83861 0386
Telephone (208) 245-4146 245-4632

August 4, 1982

Mr. Ted Graf
North Idaho MFP Amendment EIS Team Leader
Bureau of Land Management
1808 North 3rd Street
Coeur d' Alene, ID 83814

Subject: BLM Wilderness Study Areas

Dear Mr. Graf:

The intent of this letter is to verify and reemphasize oral testimony presented by myself for Potlatch Corporation at the Coeur d' Alene meeting of July 29, 1982 concerning the above referenced subject.

In review of the Draft Environmental Impact Statement we are in disagreement that the selection of the preferred alternatives for the Grandmother Mtn. and Crystal Lake areas by the BLM are representative of the input we witnessed at previous public hearings. We are of the opinion that by far the majority of people in North Idaho are against any further withdrawal of acres from the timber management land base. By classifying areas "Outstanding Natural Areas" and "Research Natural Areas" you are effectively administratively removing areas from the land base as surely as if Congress had designated these areas "Wilderness".

40.1

Further, the affect of your coordination with the Idaho Panhandle National Forest has jeopardized timber management on some 5,600 acres in the Marble Cr. drainage near your Grandmother Mtn. proposal. This Forest Service area has an old history of log production, and was allocated to timber management during their RARE II review. Your preferred alternative lists this area as not suitable for wilderness, and we were surprised that you did not follow the Forest Service lead and develop a timber management plan complimentary to the Forest Service RARE II decision.

40.2

Potlatch Corporation recommends that in the Final Environmental Impact Statement the preferred alternative for Crystal Lake be changed to Alternative 3A: No Wilderness, Timber Emphasis; and the preferred alternative for Grandmother Mtn. be changed to Alternative 3A: No Wilderness, Timber Emphasis. In both areas, the color coding on the maps should be revised so that green is used on only the acres allocated to Intensive-Extensive Timber Management. In Crystal Lake this would amount to only 4,931 acres; and in Grandmother Mtn. it would be 10,000 acres. The balance should contain a different color code and explanation.

We further would oppose classification of any acreage in the Grandmother Mtn. area as "Research Natural Area" without a much better justification than

BLM Wilderness Study Areas
Page 2
August 4, 1982

40.3

exists in the Draft EIS. The description of the area and its characteristics do not warrant withdrawal. Most certainly the referenced endorsement by the Idaho Natural Areas Coordinating Committee must be placed in proper perspective with confirmed analysis that there is truly unique habitat requiring 2,905 acres in a set aside category.

40.4

The economical impact analysis is virtually non-existent for both areas. The references on pages 4-12, 4-17, 6-14, and 6-25 are inadequate. In Grandmother Mtn. the employment distribution of Shoshone County is unimportant. The majority of workers that would be effected by non-timber management alternatives originate, or are located in Benewah, Kootenai, and Latah counties. The economical effect of withdrawal alternatives must be clearly shown in your Final EIS.

40.5

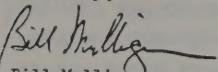
We cannot agree with your analysis of Timber Alternatives in Chapter 6, Environmental Consequences. The entire section leaves one with the impression that timber management would have disastrous effects on soils, water resources, vegetation, wildlife, visual resources, and wilderness values. We disagree with many of your statements when considering the present state of the art in road construction, logging systems, and access management. Given good management, there would be minimal effects on all the resource values.

40.6

We are quite concerned about the direction the BLM has taken in the Draft Statement. We were surprised to find that only one small area out of the five study areas was recommended for timber management. This does not seem consistent with your statement on page 4-3 concerning more wilderness in Idaho. We must point out that since 1979, considerable additional acreage has already been designated wilderness in this State. You may find far more than 70% would say we have enough wilderness today.

Potlatch Corporation appreciates the opportunity to make comment. We will remain involved in the process through final determination of land management alternatives.

Sincerely,


Bill Mulligan
Logging Manager

BM:sh

xc: Jim McAdoo
Carl Deward

Response to letter No. 40

40.1 Specific land use allocations were not made for this area following the RARE II review process. Specific allocations will be made in the Forest Plan which is currently in the draft stage.

40.2 The color coded maps in the EIS are generalized to show program emphasis. The scope of this document does not require site specific delineation of timber stands suitable for intensive or extensive timber management. Detailed maps with this information shown are available for review at the district office.

40.3 Sufficient analysis of this area has been made to support a Research Natural Area designation.

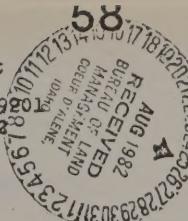
40.4 Since these areas have not been allocated previously for intensive or extensive timber management the economic impacts from allocations to non-timber uses are expressed in terms of potential increases which would be foregone. The amount of acreage currently allocated for timber management would not be reduced.

Factoring the potential increases in timber related employment and income which could be generated by intensive or extensive timber management of these two WSAs into the current employment and income data available for Benewah, Kootenai, and Latah counties shows an insignificant beneficial affect.

40.5 The EIS states that impacts from alternatives favoring timber production would be insignificant within a regional context. Numerous statements throughout Chapter 4 conclude that the adverse impacts from timber management would be insignificant assuming the use of district management guidelines and current state of the art methods for timber harvest and associated activities. The North Idaho Timber Management EIS (1981) is referenced in Chapter 4 and contains a more detailed discussion of impacts, both adverse and beneficial, which could result from timber management.

40.6 This study is an amendment to previously completed land use plans for the Coeur d'Alene District. The majority of commercial forest lands in the district have been allocated for timber management.

Donald C. Yost
301 Wall St.
Spokane, WA 99201
August 19, 1982



Dear Mssrs. Zinne and Graf,

I was unable to attend the public meetings and hearing you held concerning the management of public lands in five wilderness study areas. I have, however, thoroughly read your EIS and visited each of the WSAs and would like to offer my comments. Before I do that, I'd like to share with you my views on public meetings. Although I was out of the state when you held yours in July I have attended numerous BLM planning and wilderness public meetings in Idaho, Oregon, and Colorado--and despite different geographic locations and different faces in the crowd, the dialogues are all the same. BLM planners usually present an overview of the planning or wilderness study then open up the meeting to receive "public comments". That's when you can't tell one meeting from another and where I often wonder what good all the rhetoric does you as public land managers. I know that BLM tries to notify everyone that a meeting will take place but only a certain core of individuals show up to make a comment. Where is everyone else? I sincerely hope that you don't put alot of weight on what is said at these public meetings because I really don't think you ever hear from the average citizen in that type of forum.

There always seems to be two distinct factions at land use planning meetings: the development oriented public land user (usually a miner, livestock grazer, or timber industry type) who rant and rave about over-regulation, economic failure, too much wilderness, communistic plots, and generally try to give the impression that everything and everyone would be better off if the feds would stay out of their way and let them manage the lands because they "know what's right for America." Commenters from this group always fail to state that they are often times heavily subsidized by the rest of us taxpayers so that they can continue living the lifestyle they want. Instead of blaming their woes on the current poor economic climate of the U.S., elected officials, the low value of gold and silver, the low return on livestock investments due to oversupply, the high unemployment in the timber

industry due to the depressed building industry, and just possibly their own mismanagement, they try to convince us that the BLM or the Forest Service is once again driving them to the brink of bankruptcy. I've talked with some of these individuals privately and have learned that they know exactly what they're doing--using federal land managers as scapegoats. A neo-miner in Colorado mentioned to me one time that the worse thing the BLM could do would be to let him do whatever he wanted-no control over roads, tailing pile locations or anything. He said that if that happened he would no longer have anyone to blame for his inability to make money and he couldn't milk his California investors anymore. He also admitted that a number of so called 'miners' only use their claims as summer homes and fight any BLM management actions because they are afraid their good deal will be closed down should their claim be examined. A logging manager for Weyerhauser Corp. in Oregon told me after a Forest Service meeting that his company may become interested in federal timber sales because his company had so badly mismanaged their own lands that it would take 50 years before they could cut timber from much of their holdings.

The other faction at public meetings is the hard line environmentalists (or so they think of themselves). Often times this group is represented by idealistic students or ather academic members who see their cause as a devine mission. They extoll the values of solitude and wilderness designation yet don't have an understanding of the total subject past what they read in Sierra Club environmental alert mailers. They blame anything they can on the current administration, evidently forgetting that the administration didn't get to Washington by magic. Anyone who is so naive to think federal land managers can ignore the desires of the administration that is running the show needs to wake up to reality.

I once asked a self-proclaimed environmentalist why he was so interested in seeing a certain portion of central Colorado made a wilderness ares. He told me that although he had never set foot in the area he felt an obligation to support what his local club president wanted. It turned out that the local president had never seen the area either but felt that he needed to fight for wilderness protection anywhere he could.

I guess I'm trying to illustrate the fallacy of using the input you receive at public meetings for any substantial land use decisions. The motives of the commenters are many times selfish at best and down right subversive at worse.

I'll get off my soap box now and give you my comments on your EIS.

58.1

1. The map on page vi shows 38,468 acres in your study yet I remember a mail out from you showing about 54,000 acres under study. What happened to the other 15,000 acres?

58.2

2. In chapter 2 you mention that protective designations were recommended by respondents to your request for input regarding issues. Did a high percentage of those who responded feel these areas need some sort of protection?

5
1
2
0

3. Your preferred alternative for Selkirk seems appropriate in light of the USPS study of that area. I don't think there is much you can do with that ground, anyway.

58.3

4. The Crystal Lake area is truly outstanding for scenic and recreational values. Why would this area not contribute to diversity in the wilderness system? Although this area contains some excellent timber in the western portions I don't think the slight increase you would accrue in your allowable cut outweighs the impacts that would result from road building in the watersheds.

58.4

I seem to recall that most of this area contains highly erodible soils and ORV use should not be permitted.

5. The Grandmother Mountain area seem to be a real problem for a land manager. I had thought it should be designated as wilderness for a long time but I recently hiked the area extensively and now don't think wilderness designation is appropriate. From a clinical viewpoint, it won't add to the ecosystem diversity of the system and further designations would actually skew the geographic diversity of wilderness areas even more toward the Northwest. However, this is a very unique area from an ecological, scenic, and historical standpoint. The Lund Creek area has been proposed as a study area since the late 60's and the upper Marble Creek area was at one time being considered for Historic District designation. These, along with your own wilderness inventory and WSA designation point out the high quality of this area. I agree with your ONA

58.5

and RNA proposals as long as the trail that runs through the area where the proposed timber management area meets the ONA is on the ONA side. I cannot tell where it is from your small map.

From an economic standpoint I feel that protection of the ONA and RNA areas definitely outweighs intensive timber management for these areas. Your analysis shows your preferred alternative increases local employment potential by 5 jobs, whereas the timber alternative would increase employment by 16 jobs. With economic conditions the way they are, I seriously doubt ~~in~~ any increased job potentials could be utilized by the timber industry in the foreseeable future. I do economic consulting for a number of large lumber and timber organizations and our projections indicate a six year recovery period for the timber industry to get back to 1980 employment levels. Jobs are vitally important to community stability and the local economy but searching for potential jobs which would result from allocating more lands for timber management is not only impractical but is economically inappropriate. All future economic projections clearly show that the country's lumber needs will never surpass the levels of 1979-80. Obviously we don't need more land for timber management, we need the federal government, state government, and private timber companies to better manage what they have now.

58.6

I do question your estimate of 2500 annual visitor days for the area (page 4-16). A state recreation/tourist survey completed a few years back showed that over 7200 visitor days were used in the Grandmother area. Although this included quite a bit of state and FS land I'm sure the majority of visitors spent some time in your WSA. If 5000 visitor days are spent in the WSA each year, you're looking at a direct annual income of between \$300,000 and \$500,000 (depending on the use, of course). Applying the standard multiplier effect you come up with a million dollar a year industry. Plus you avoid most aspects of environmental degradation. This is very important - the facts just don't support a need for more land devoted for timber management. As Thomas Jefferson said, "More does not always mean better, in fact it usually doesn't even mean more."

6.. I've floated through your Snowhole Rapids area at least a dozen times. I have never understood why it was considered a WSA. Sure, it is a neat area but the terrain and

river will always limit access and development. Solitude is only found in those stretches where canyon walls obscure one's peripheral view. In the open areas you could easily think you were floating down portions of the Spokane River- not wilderness quality by a long shot. Even though there appears to be no conflicts which would prevent this from being designated a wilderness, such a designation would smack of tokenism. Since powerboats have a preexisting right, they would be permitted in a wilderness. I personally can't visualize a wilderness setting that includes jet boats. Let's be practical and go along with your preferred alternative.

7. I question your "recreation emphasis" name for your preferred alternative for Marshall Mountain. Why not admit that mining claims would hamper any serious recreation management and call the alternative "mining emphasis" or something similar. Since miners are permitted access to their claims at all times, would your proposed semi-primitive nonmotorized recreation prevent a miner from crossing that ground in a jeep or whatever to work his claim? I think that miners have a lawful right to pursue thier trade on public lands. However, I would hope that the BLM would start an aggressive drive to ensure that claim agreements are being maintained. The purpose of a mining claim is not to provide a home site or recreational property to someone who simply files a claim. A lot of that goes on the the Marshall Mountain area.

I apologize for the length of this letter. A couple of other minor points. I'm glad you recognized the needs for protection of amenity resource values but didn't try the fantasy of attaching dollar values to them. I've seen over 50 different methodologies that try to show how one acre of wilderness is worth anywhere from \$100 to \$19,000. None of these studies has stood up to careful scrutiny. I'm happy to see that both BLM and the FS have dropped these phony economic analyses.

All in all, I think you did a very good job in your analysis and its documentation. Chapters 3 and 4, and 6 are easy to follow and contain alot of pertinent information. It is evident that you considered all available information before you selected the preferred alternatives.

I will be in Brazil until November but I will look forward to seeing your final EIS when I return to Spokane.

Sincerely,
Donald C. Yet
Economic Consultant

Response to letter No. 58

- 58.1 In March 1981 we sent out a mailer requesting public input regarding planning issues for 53,452 acres of roadless public lands. This Amendment/EIS document addresses the 37,748 acres which were classified as Wilderness Study Areas. Land use allocations for the remaining 15,704 acres of roadless land were made and analyzed through an environmental assessment in 1985.
- 58.2 A high percentage of those who responded felt that truly unique or outstanding areas need some form of protection, either by designation or through application of appropriate management constraints.
- 58.3 Although this area does contain wilderness characteristics, its ecosystem is currently represented in numerous areas of the NWPS. Also, the addition of this WSA to the NWPS would increase the concentration of wilderness in the Rocky Mountain region rather than balance the distribution of wilderness on a national or regional basis.
- 58.4 The preferred alternative, if implemented, would not permit road building or ORV use.
- 58.5 Please see response 2.5.
- 58.6 Please see response 2.4.
- 58.7 Please see response 15.3. The preferred alternative proposes that the entire WSA be open to vehicular use and be managed under semi-primitive motorized guidelines. Access to claims would not be restricted.



BNTimberlands^{NC}

Rocky Mountain District

August 24, 1982

Mr. Wayne Zinne
District Manager
Bureau of Land Management
1808 North 3rd Street
Coeur d'Alene, ID 83814

RE: North Idaho Management Framework Plan Amendment (Plan)
and Draft Environmental Impact Statement (DEIS)

Dear Mr. Zinne:

BN Timberlands Inc. (BNTI) is interested in the above document because we manage approximately 2,200 acres of land bordering two of the study areas analyzed in the DEIS, i.e., Grandmother Mountain and Crystal Lake. We have reviewed the Plan and DEIS and offer the following comments for your consideration.

On numerous occasions, we have requested in writing that BLM, in its planning process, respond to the plans and needs of adjacent private landowners especially regarding access. Unfortunately, the BLM has failed to address our concerns in this Plan. We believe the goals in the Plan will not be achievable unless BLM examines and seeks to resolve the impacts which its proposal could have on adjacent landowners.

59.1 BLM's land planning is directed by the Federal Land Policy and Management Act (FLPMA). This statute states that the BLM's land use plan shall "assist in resolving to the extent practical, inconsistencies between Federal and non-Federal government plans..." and the process shall provide "early public notice of proposed decisions which may have a significant impact on non-Federal lands." [P.L. 94-574 Section 202 C(9)]. These requirements have not been met in the BLM planning process.

59.2 Our comments and recommendations specific to the Plan and DEIS are listed below:

1) Pages 3-27 & 3-28. Under the proposed alternative for the Grandmother Mountain and Crystal Lake areas, BLM proposes to limit or restrict vehicle use and prohibit timber harvesting within these two areas. BLM also encourages the U.S. Forest Service to manage its land adjacent to Grandmother Mountain similar to the BLM proposal. This restrictive management is inconsistent with BNTI's plan to access and intensively manage its

Mr. Wayne Zinne
August 24, 1982
Page two

59.3

adjacent timberlands. According to a conversation with the EIS team leader, Mr. Ted Graf, it is not the BLM's intent to restrict access to private lands. We request the Plan clearly state this intent.

59.4

The BLM will not be able to effectively preserve the character of the proposed Grandmother Mountain and Crystal Lake Outstanding Natural Area (ONA) unless it acquires, through exchange, BNTI's adjacent lands. FLPMA, section 206, provides for land exchange where the public interest will be served. Since the BLM intends to manage the ONA exclusively for recreation while restricting forest management, we believe a land exchange is in the public interest and should be supported in the Plan.

Listed below are the BNTI lands we desire to exchange out of:

59.5

Portion of Section 1, T43N, R4E	Portion of Section 17, T43N, R4E
" " " 3, " "	" " " 31, " "
" " " 5, " "	" " " 33, " "
" " " 7, " "	" " " 21, T47N, R1E
" " " 11, " "	" " " 27, " "
Section 29, " "	

We are not familiar enough with the BLM lands available for acquisition but are prepared to meet with your agency for the purpose of developing a land exchange plan. This plan should then be incorporated into the final EIS for public review.

59.6

2) Page 3-28. The visual management criteria should be defined so the public is informed as to what effects the Visual Resource Management Class II will have on timber management. The BLM should also make it clear to the public that private landowners are not required to manage their lands under the BLM visual guidelines.

59.7

3) Page 3-30. Under wildlife protection, the DEIS should state that the BLM road closures will not preclude administrative use of the road by anyone with valid rights.

59.8

4) Page 3-33. Under roads, we request that the BLM state its intent to coordinate transportation planning with affected private landowners.

59.9

5) Page 3-33. Under interrelationships, the BLM does not address the need to coordinate its planning with adjacent private landowners. We recommend the BLM give adequate consideration to these landowners in the Plan. This effort will attempt to resolve conflicts which result because of landowners' different management objectives.

In conclusion, we believe implementation of the BLM Plan is possible only if the BLM addresses the objectives and needs of adjacent private landowners, especially in regard to access in mixed ownership situations. Only then will the BLM be capable of meeting its own land management objectives.

Mr. Wayne Zinne
August 24, 1982
Page three

Please let us know when and where it is convenient for you and your staff to meet with us to discuss land exchange.

Thank you for the opportunity to comment.

Sincerely,

Judy A. Barker

Judy A. Barker
District Supervisor
Land Planning

JAB/mc

cc: Ralph D. Kizer

Response to letter No. 59

- 59.1 The general issue of the need for access by adjacent land owners was considered during alternative development and analysis. In this context, no significant beneficial or adverse impacts to adjacent land owners were anticipated to result from implementation of the preferred alternative. Site specific access plans from adjacent landowners were not available for analysis.
- 59.2 While the preferred alternatives for the Crystal Lake and Grandmother Mountain WSAs may differ in emphasis from the general management intent of adjacent non-federal lands, these alternatives are not inconsistent nor incompatible with the expressed management emphasis for these non-federal lands.
- 59.3 It is neither the intent nor policy of BLM to restrict access to private lands.
- 59.4 The outstanding natural character of the Crystal Lake and Grandmother Mountain WSAs can effectively be maintained through implementation of the preferred alternative for these areas regardless of management activities on adjacent private lands.
- 59.5 Exchange proposals and negotiations are not within the scope of this Amendment/EIS. Such proposals can be initiated through the standard application process. Prior to decisions on such actions, the proposal would be analyzed through the development of a lands report and site specific environmental assessment. Recent budget cuts have severely constrained the processing of any exchange proposals.
- 59.6 Management of public lands under Visual Resource Management Class II precludes most aspects of intensive timber management. Activities such as road construction and timber harvesting would be substantially constrained. Please refer to the North Idaho Timber Management EIS (1981). Private landowners are not required to manage their lands under BLM visual guidelines.
- 59.7 Valid rights would be honored.
- 59.8 No transportation plans are being developed for these WSAs. Should such plans be deemed necessary, BLM policy would require coordination with affected private landowners.
- 59.9 Please see responses 59.1 and 59.2. Attempts to obtain detailed land use plans which out the objectives and needs of adjacent private landowners have been largely unproductive to date.



60

United States Department of the Interior

NATIONAL PARK SERVICE

Pacific Northwest Region
Westin Building, Room 1920
2001 Sixth Avenue
Seattle, Washington 98121

IN REPLY REFER TO:

L7619(PNR-RE)
x1202-03
DES 82/39

August 24, 1982

Memorandum

To: District Manager, Coeur d'Alene District, Bureau of Land Management

From: Acting Associate Regional Director, Recreation Resources and Professional Services, Pacific Northwest Region

Subject: Draft North Idaho Management Framework Plans (MFP) Amendment and Environmental Impact Statement (DES 82/39)

We have reviewed the subject document and have the following comments:

Impacts to Units of the National Park System

It appears, on the basis of the material provided, that no existing or presently proposed units of the National Park System will be affected either directly or indirectly by the proposed action.

Cultural Resources

It appears that the proposal is in compliance with the requirements outlined in 36 CFR 800, "Protection of Historic and Cultural Properties."

Recreational Resources

60.1

The Idaho Statewide Comprehensive Outdoor Recreation Plan (SCORP) should be completed to determine potential effects of the alternatives on recreational resources. The State Liaison Officer (SLO) maintains the SCORP and can assist in its interpretation and application. The SLO for Idaho is: Mr. Dale R. Christiansen, Director, Idaho Department of Parks and Recreation, Statehouse, Boise, Idaho 83707.

Wild and Scenic Rivers

The fifth paragraph on page 3-34 should be revised to read:

60.2

The National Park Service (NPS) has been assigned responsibilities for conducting studies of most proposed



60

60

2

wild and scenic rivers relative to the Wild and Scenic Rivers Act. NPS also reviews environmental documents for adequacy in regard to impacts on proposed and designated wild and scenic rivers.

60.2

In addition, NPS is responsible for inventorying the best remaining rivers and river segments still in a relatively natural, undeveloped condition. This inventory serves several purposes, including recommendations for additions to the lists of study rivers [Section 5(a)] and potential rivers [Section 5(d)] under the Wild and Scenic Rivers Act. Probable impacts to these rivers are documented in management plans and environmental statements after consultation with the National Park Service.

A summary report of the Nationwide Rivers Inventory is available from the National Park Service upon request. The contact for the inventory is Kelly Cash. He may be reached at 206-442-5366.

The alternatives described in the North Idaho MFP Amendment and EIS would not impact any rivers currently listed in the inventory.

Thank you for the opportunity to review this document.

Donald R. Field

Response to letter No. 60

60.1 The SCORP was consulted.

60.2 It was determined that these types of descriptions were not needed and they have been deleted.

Nez Perce

ECONOMIC AND COMMUNITY DEVELOPMENT



NEZ PERCE TREATY
JUNE 11, 1855

61

61

Box 365
LAPWAI, IDAHO
83540

(208) 843-2253

24 August 1982

Wayne Zinne, District Manager
Bureau of Land Management
1808 N. 3rd Street
Coeur d'Alene, ID 83814

Re: MFPAEIS-1792
North Idaho MFP Amendment & Environmental Impact Statement draft

Dear Wayne:

I would like to thank you for the trip on the Lower Salmon River to address Cultural Resource Management concerns. Another major duty assigned to me on the 1st of July is the coordination of the tribes activities with respect to the National Environmental Policy Act. Documents that guide my actions are the Act itself and 40 CFR, Parts 1500-1508, the regulations for implementation by federal agencies of the NEPA (Reprint 43 FR 55978-56007). Unfortunately, I did not review your draft EIS prior to our float so I could not take advantage of the outstanding opportunity to respond to the EIS. As the NEPA is a conflict-resolving document, I would recommend a cooperating agency agreement with the Nez Perce Tribe (40 CFR 1508.5) to prepare in the EIS the Nez Perce tribal treaty rights concerns in 2 WSA; specifically, the Snowhole Rapids WSA and the Marshall Mountain WSA (40 CFR 1501.6(b)(3)). The preparation (and my present comment) would be in the following nature:

1. The United States Courts has ruled that the treaty rights of Indian tribes are not a grant of rights but a reservation of rights already possessed (United States vs. Winans, 198 U.S. 371 (1905)). Since the rights are established by treaty between the United States and the Nez Perce Tribe (12 Stats. 957; 14 Stats. 647; 15 Stats. 693), they are protected by the 6th Article of the Constitution of the United States. The EIS should address the statutory obligations of the United States as to how these obligations affect on 40 CFR 1500.3.

Wayne Zinne
24 Aug 1982
Page Two

2. Water Rights as discussed under Idaho Department of Water Resources, page 3-34. The United States court has ruled, that for the United States words not to be without meaning in treating with Indian tribes, the possession of water rights by the Indians to fulfill their Rights and success in their industries.

History of this ruling: In the United States District Court for the District of Oregon, Civil No. 75-914, the court ruled that the Klamath Indian (a terminated tribe) possessed water rights to protect their hunting and fishing rights. To preserve the rights the use of the water was to maintain the Klamath National Wildlife Refuge as a wetland and the Winema National Forest on a sustained yield basis. The water rights of those two entities were not determined as the Indians water rights fulfilled their purposes.

Since the Nez Perce Tribe has hunting and fishing rights along the Salmon River not limited to the 2 WSA the Nez Perce Tribe possesses the water rights on the Salmon River to protect these rights. Since by your discussion on page 5-9 that the anadromous fishes are depleted and the mention that this depletion is the Fish and Wildlife Service most important national problem, the emphasis of the Nez Perce possession of water rights with a priority of time immemorial should be most critical.

3. Since this is an legislative EIS the Nez Perce Tribe finds an outstanding opportunity with regard to alternatives not within the jurisdiction of the lead agency (40 CFR 1502.12(c)). This unique opportunity would allow a petition of redress against the United States per Article 1 of the Bill of Rights of the Constitution of the United States as well as a resolution of an issue of Human Rights. The Salmon River country, especially along the Salmon River in the Snowhole WSA, has been a homeland for untold generations of the Nez Perce Tribe. This country was established as that homeland by the Treaty of 1855 between the Nez Perce Tribe and the United States. Subsequent to the treaty gold was discovered in the Nez Perce country. The United States called the Nez Perce Tribe again to renegotiate so that small areas where gold was located would be removed from the reserved Nez Perce lands. Once in treaty council the United States contrary to the Northwest Ordinance of 1787 (1 Stat. 51, Note a) to act in good faith removed 90% of the reserved lands with indications that for the Nez Perce not to negotiate would result in dire consequences to the tribe. The specific redress that could be effected as a legislative alternate would be the return to the ownership of the Nez Perce Tribe the 2 WSA in the 1855 Treaty area.

Wayne Zinne
24 Aug 1982
Page Three

3. (continued) The Nez Perce Tribe is a growing tribe and needs new areas to expand into and it would be ideal to expand into some of their original homeland. This alternate would still allow limited recreation reducing environmental degradation. Cooperative agreements could be effected for river enforcement. Economic impacts would be insignificant as with the other alternatives.

In terms of the rights expressed they probably would have been covered under Valid Existing Rights, page 3-22. A listing of those rights would be of good benefit from a tribal point of view. That is to know what they are and that they are recognized. If it is possible I would like to receive a copy of both the North Idaho Timber and Grazing Management EIS. Again, Wayne, thanks for the trip we had and allowing this comment to be made.

5-35

Thank you

James Lawyer
Research Data Planner
Nez Perce Tribe of Idaho

cc: Clair Whitlock, State Director, BLM, Boise
Lanny Wilson, Area Manager, BLM, Cottonwood
Ted Graf, EIS Team Leader, BLM, Coeur d'Alene
Gordon Higheagle, NPTEC Member

JL:jg

Response to letter No. 61

The BLM is cognizant of the rights and interest of the Nez Perce tribe in the area of the Snowhole Rapids and Marshall Mountain WSAs. Since the Nez Perce tribe holds these rights and interests we requested and obtained comments from tribal officials. During the scoping process certain concerns such as hunting and fishing rights, water rights, and land jurisdiction issues were identified. It was determined that these concerns were not within the scope of the Amendment/EIS and were, therefore, not specifically addressed in the document.

Robert D. Hanson
Rt. 1, Box 46
Medimont, ID 83842
August 27, 1982

Wayne Zinke, District Manager
Coeur d'Alene District Office, BLM
1808 North Third Street
P. O. Box 1839
Coeur d'Alene, ID 83814

I have reviewed the "North Idaho MFP Amendment & Environmental Impact Statement draft" of the BLM Coeur d'Alene District, 1982.

The perspective presented in this letter is that of a person who owns land in a popular motorized-recreation area who likes to occasionally get away to the quiet beauty of mountain lakes, ridges, and creeks. At home, 1 mile from a National Forest campground and closer to a sportsmans' access to the Coeur d'Alene River, we get a lot of tourist traffic. We permit camping on our land along the Coeur d'Alene River as long as campers clean up and don't abuse the privilege, and we estimate there is between 300 and 600 recreational visitor days use of our land by campers, per year, and about as many others just driving back and forth on the dead-end road. People need places to go camping. On the other hand, we who prefer our recreation without the sounds of motorcycles, outboard motors, radios, and chainsaws need places to go too, and there should be scattered motorless areas not prohibitively distant where people can go for wilderness-type experience, even if it is only on a small scale.

I believe that much of the public demand for wilderness for recreation could be accommodated by administrative means, primarily by keeping motorized recreation out of certain areas and being careful about roadbuilding and logging. Take for instance the typical mountain lake, headwater of usually a north or east-flowing creek, maybe with pockets of old timber scattered around it. Many such lakes are already accessible by road or jeep trail. Where there is no road, let's keep it that way, and keep the motorcycles out too so that visitors can have tranquility even if the other side of the ridge and the neighboring basins are roaded and logged. Where feasible, leave some timber along trails. On rocky ridges, the timber is often of low value or too scattered anyway. Along creeks, for which the MFP has buffer guidelines, the corridor should be extended to include the trail plus 25 feet, particularly if the pattern of logging roads or slope steepness would make it difficult for hikers and fishermen to use the road instead of the trail. Where trail corridors are not left across logged areas, trails should be restored or realigned through or around the logged area, and marked well so that hikers need not spend hours exploring logging roads looking for the continuation of their trail. There is no need for many logged areas to remain open to off-road-vehicle use, or to recreational vehicle use at all. Some buffer areas near roadless areas could be logged and, after woodcutters have picked over it for a few years, then close the area to non-official vehicles and manage the buffer as part of the roadless area until the next logging.

The MFP does not show how special designations for wilderness, OMA, RMA, intensive timber management, or recreation would be coor-

64.1

-2-

dinated with adjacent private lands. I believe owners of adjacent land of greatest significance to the MFP should be consulted and attempts made to assure compatibility of land use plans. For example, management of Crystal Lake WSA would be enhanced if the owner(s) of Section 29 along the east side of the WSA would agree to manage the land in coordination with the BLM. There may be tax advantages to such coordination. One precedent for such coordinated management is the Grouse Lakes Off-Road-Motor-Vehicle-Control Area in California, a 19,000 acre area of checkerboard ownership, about half Tahoe National Forest and half private land, owned mostly by Southern Pacific Land Company with the remainder Michigan-California Lumber Company, Pacific Gas and Electric Company, and various small parcels, if memory is correct. Federal and private owners in the Grouse Lakes "Motorless Area" agreed to close that popular recreation area to off-road vehicles mainly because of damage being done by such vehicles to young trees, soils and water quality.

Of the wilderness study areas discussed in the report, I am personally only familiar with the Crystal Lake WSA. While I would rather see Wilderness designation for the Crystal Lake WSA than the BLM-recommended Outstanding Natural Area designation, ONA designation would be the next best alternative. For the other study areas, I generally support the BLM recommendations, except that Timber emphasis for the west side of the Grandmother Mountain WSA should be moderated to protect recreation values in a corridor along the Grandmother Mountain-Grandfather Mountain ridge if this trail receives much use.

Robert D. Hanson
Robert D. Hanson

Response to letter No. 64

64.1 Our analysis indicates that the preferred alternatives for these WSAs are generally compatible with adjacent land uses. Where appropriate, consultation and coordination with adjacent owners will occur prior to alternative implementation to ensure compatibility.

August 27, 1982

Mr. Wayne Zinne
Bureau of Land Management
Box 1839
Coeur d'Alene, Idaho 83814

Re: Marshall Mountain WSA

Dear sir:

Through our rather extensive mineral surveys it is a well know fact that the potential of a large mineral area exists in this area under consideration. This could very well be Idaho's largest Gold reserve, and should not be put under BLM management control to exclude mining. This area should not be managed in a way to discourage or hinder any way, the development of mining. The roads have been constructed by mining people and access roads should be permitted as needed. For the most part this area is very steep, gradients being better than 60%.

65.1

Sections 21 and 22 and 27 and 28 all have the same vein characteristic mineral content as that of Section 20, the location of the Golden Anchor, the Kimberly, the Sherman-Hove and other mines that were good gold producers and at present considerable exploration work is being done or in the planning.

I see no reason why this should not be considered for a multi-use area, thus assuring unknown future needs for the sake of the economy for the State of Idaho.

Thank you for the opportunity of receiving my opinion on this Area.

Respectfully

Leonard J. Junger
Leonard J. Junger

Response to letter No. 65

65.1 Please refer to response 15.3.



IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

August 27, 1982

Mr. Wayne Zinne, District Manager
U.S. Bureau of Land Management
1808 North 3rd Street
Coeur d'Alene, ID 83814

Dear Mr. Zinne:

We have completed our review of the North Idaho MFP amendment and draft Environmental Impact Statement, and wish to make the following comments:

This Department is supportive of the BLM's proposed action and selection of preferred alternatives for the following areas:

1. Selkirk Crest - recommended for wilderness, but contingent upon Forest Service making a similar recommendation for their adjacent RARE II unit. The official position of the Fish and Game Commission is that the USFS RARE II unit not be designated as wilderness. If the Selkirk Crest area is not designated as wilderness, we would then recommend it be managed as an outstanding recreation area in order to provide a diversity of recreational opportunity.
2. Crystal Lake - to be designated as an outstanding natural area.
3. Grandmother Mountain - to be designated as an outstanding natural area and research natural area on designated portions of the unit with timber emphasis on the remainder of the area.
4. Snowhole Rapids - to be managed with recreational emphasis.
5. Marshall Mountain - to be managed with recreation emphasis. (We had originally recommended that the unroaded portion of this area be included in the River of No Return Wilderness Area, but it was omitted when the wilderness boundaries were finalized.)

Mr. Wayne Zinne
August 27, 1982
Page 2

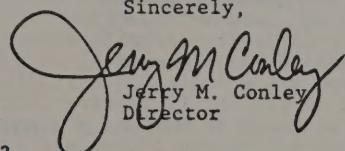
67.1

On page 3-23, paragraph 10, line 2, you indicate in the fish and wildlife activities section that no commercial trapping would be permitted in any area designated as wilderness. Inasmuch as the BLM would be providing for the opportunity to hunt and fish within the wilderness area, it does not appear logical that trapping should be excluded. Other wilderness areas in the state that have been designated by the U.S. Forest Service do not prohibit trapping, which is a permitted activity under the Wilderness Act.

Our support of your proposed action is predicated on hunting, fishing and trapping being permitted in all areas.

Thank you for the opportunity to comment on this document.

Sincerely,



Jerry M. Conley
Director

cc: Regions 1, 2 & 3
Bur. Fisheries
Bur. Wildlife

Response to letter No. 67

67.1 The BLM Wilderness Management Policy of September 1981 states in Chapter III.D.5: "Trapping of furbearers, such as mink, marten, beaver, and muskrat, is a compatible wilderness use and will be allowed under State laws and regulations. Commercial trapping will not be permitted. Incidental trapping, if it is not the trapper's sole source of livelihood, is permitted."

V. David Welch Associates, Inc.

SANDPOINT OFFICE

DOVER HIGHWAY
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August 27, 1982

COEUR D'ALENE OFFICE

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COEUR D'ALENE, IDAHO 83814

Ph. (208)664-9382

Mr. Ted Graf
North Idaho MFP Amendment EIS Team Leader
Bureau of Land Management
1808 North Third Street
Coeur d'Alene, Idaho 83814

Re: BLM Wilderness Study Areas - Draft Environmental Impact Statement

Dear Mr. Graf:

I am writing this letter to emphasize my personal and my company's opposition to any further withdrawal of timber producing acreage from the current timber management land base. I believe my sentiments are those of the vast, although probably quite silent, majority of permanent North Idaho residents.

Areas of specific concern include:

Making defacto wilderness areas through reclassification to "Outstanding Natural Areas" and "Research Natural Areas".

The inconsistancy in your Draft Statement (page 4-3) concerning wilderness in Idaho and your recommendations that only one area out of the five study areas we recommended for timber management.

78.1

Your failure to coordinate with the Idaho Panhandle National Forest; particularly concerning your failure to develop a timber management plan in the Grandmother Mountain Proposal consistant with the Forest Service RARE II decision for the area.

78.2

Your analysis of Timber Alternatives in the chapter on Environmental Consequences (Chapter 6). The chapter has erroneously given the reader the impression that timber management would produce severely adverse impacts on flora, fauna, visual impact and "wilderness values". I believe you are either unfamiliar with, or have chosen to ignore, state of the art road construction and timber harvesting techniques.

Bureau of Land Management

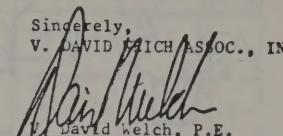
August 27, 1982

Page 2

My closing pleas would be for you to reconsider the preferred alternatives for Crystal Lake and Grandmother Mountain. By changing the alternative to "No Wilderness, Timber Emphasis" the areas can be successfully managed to produce timber, provide jobs, and with the support of the timber industry produce minimal visual, aesthetic and environmental impact.

Thank you for the opportunity to comment on the Draft.

Sincerely,
V. DAVID WELCH ASSOC., INC.


V. David Welch, P.E.
President

VDW/kc

Response to letter No. 78

78.1 Please refer to responses 6.2 and 40.1.

78.2 Please refer to response 40.5.



STATE OF IDAHO

DEPARTMENT OF LANDS

STATEHOUSE, BOISE, IDAHO 83720

GORDON C. TROMBLEY
DIRECTOR

July 14, 1982

Mr. Ted Graf
North Idaho MFP Amendment
& EIS Team Leader
Bureau of Land Management
Coeur d'Alene District Office
P.O. Box 1339
Coeur d'Alene, Idaho 83814

Dear Mr. Graf:

The State of Idaho, through the State Board of Land Commissioners, made application on December 20, 1978 for 1,880 acres of what is now part of the Crystal Lake Wilderness Study Area as part of the State's in-lieu land selection (State Selection List No. 956; Your I-15037). (See map and legal description.)

Your recent North Idaho MFP Amendment & Environmental Impact Statement draft recommends as the preferred alternative that the Crystal Lake Wilderness Study Area (including the 1,880 acres under lieu land application) be classified as an Outstanding Natural Area. The 1,880 acres the State wishes to acquire is valuable timber producing land, as pointed out in the EIS draft. This land should be left in multiple use management and managed, among other things, for timber production. This would be done under State ownership. Approximately four miles of the selected parcels exterior boundary is bordered by State land. It ties in well with our present ownership and would form a good management unit for the State.

We request that the 1,880 acres under lieu land application not be classified as an Outstanding Natural Area and that it be made available for State acquisition through lieu selection.

Sincerely,

GORDON C. TROMBLEY
Director

GCT:fb
Attachment (1)
cc: Land Board Members

EQUAL OPPORTUNITY EMPLOYER

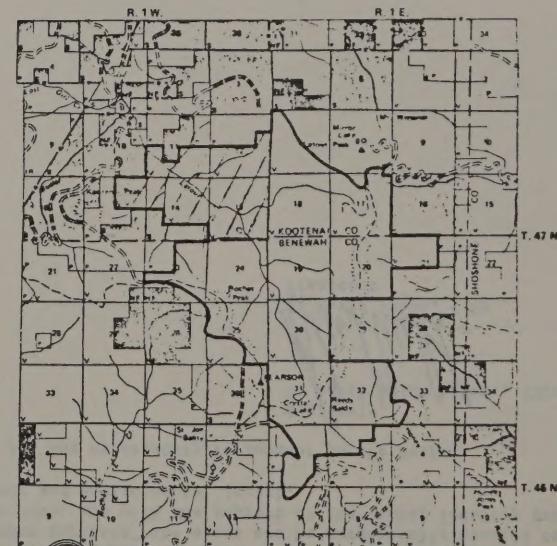
STATE BOARD OF LAND COMMISSIONERS
JOHN V. EVANS
GOVERNOR AND PRESIDENT
PETE T. CENARRUSA
SECRETARY OF STATE
DAVID H. LEROY
ATTORNEY GENERAL
JOE R. WILLIAMS
STATE AUDITOR
JERRY L. EVANS
SUPT OF PUBLIC INSTRUCTION

LANDS WITHIN CRYSTAL LAKE WSA
UNDER LIEU LAND APPLICATION

Legal Description

Acres

Township 47 North, Range 1 West		
Section 11:	W ₂ SW _{1/4} , SE _{1/4} SW _{1/4} , SE _{1/4}	280.00
Section 12:	SE _{1/4} NE _{1/4} , S _{1/2}	360.00
Section 13:	A11	640.00
Section 14:	N _{1/2} , NE _{1/4} SW _{1/4} , N _{1/2} SE _{1/4}	440.00
Section 15:	NE _{1/4}	160.00
TOTAL:		1,880.00



MAP 1-3 CRYSTAL LAKE WSA (61-10, 9027 Acres)

NO RESPONSE REQUIRED

APPENDIX 1

INTERVIEW QUESTIONS - Questions about your family history

The purpose of this Appendix is to help you think about your family history. It consists of some questions which may help you to think about your family history. These are not necessarily the only questions you could ask, but they will help you to start thinking about your family history.

SECTION 1 - Questions about your family

These questions will help you think about your family and the different ways in which your family has changed over time. You can answer these questions in any order you like.

1. Family size and composition: The size of the family, whether it is large or small, and the number of children in the family.

2. Family structure: The way the family is organised, such as whether it is a nuclear family or an extended family, and the relationships between family members.

3. Moving from one place to another: The reasons why people move from one place to another, and the different types of moves that can happen.

APPENDIX 1

4. Marriage and divorce: The reasons why people marry and divorce, and the different types of marriage and divorce.

5. Family size and composition: The size of the family, whether it is large or small, and the number of children in the family.

6. Family structure: The way the family is organised, such as whether it is a nuclear family or an extended family, and the relationships between family members.

7. Moving from one place to another: The reasons why people move from one place to another, and the different types of moves that can happen.

8. Marriage and divorce: The reasons why people marry and divorce, and the different types of marriage and divorce.

9. Family size and composition: The size of the family, whether it is large or small, and the number of children in the family.

10. Family structure: The way the family is organised, such as whether it is a nuclear family or an extended family, and the relationships between family members.

11. Moving from one place to another: The reasons why people move from one place to another, and the different types of moves that can happen.

12. Marriage and divorce: The reasons why people marry and divorce, and the different types of marriage and divorce.

13. Family size and composition: The size of the family, whether it is large or small, and the number of children in the family.

14. Family structure: The way the family is organised, such as whether it is a nuclear family or an extended family, and the relationships between family members.

15. Moving from one place to another: The reasons why people move from one place to another, and the different types of moves that can happen.

NO RESPONSE REQUIRED

1. ПОИСКИ

APPENDIX 1
OTHER DATA OR ANALYSIS REQUIRED - WILDERNESS CRITERIA AND QUALITY STANDARDS

The Bureau of Land Management's (BLM) Wilderness Study Policy establishes two criteria to be considered in determining whether a WSA is more suitable for wilderness or more suitable for other uses. They are 1) evaluation of wilderness values, and 2) manageability. In addition, six quality standards are to be used for analysis.

CRITERION 1 - EVALUATION OF WILDERNESS VALUES

The amendment and EIS must consider the extent to which each of the following components contributes to the overall value of an area for wilderness purposes:

1. Mandatory Wilderness Characteristics: The quality of the area's size, naturalness, and outstanding opportunities for solitude or primitive recreation.
2. Special Features: The presence or absence, and the quality of the following optional wilderness characteristics — ecological, geological, or other features of scientific, educational, scenic, or historical value.
3. Multiple Resource Benefits: The benefits to other multiple resource values and uses which only wilderness designation of the area could ensure.
4. Diversity in the National Wilderness Preservation System: Considers the extent to which wilderness designation of the area under study would contribute to expanding the diversity of the National Wilderness Preservation System from the standpoint of each of the factors listed below:
 - a. Expanding the diversity of natural systems and features, as represented by ecosystems and landforms.
 - b. Assessing the opportunities for solitude or primitive recreation within one day's driving time (5 hours) of major population centers.
 - c. Balancing the geographic distribution of wilderness areas.

CRITERION 2 - MANAGEABILITY

The capability for an area to be effectively managed to preserve its wilderness character must be considered.

QUALITY STANDARDS

The Wilderness Study Policy also directs that the following six quality standards be used for analysis and documentation.

1. Energy and Mineral Resource Values: Recommendations as to an area's suitability or nonsuitability for wilderness designation will reflect a thorough consideration of any identified or potential energy and mineral resource values.
2. Impacts on Other Resources: Consider the extent to which other resource values or uses of the area would be foregone or adversely affected as a result of wilderness designation.
3. Impacts of Nondesignation on Wilderness Values: Consider the alternative use of land under

study if the area is not designated as wilderness, and the extent to which the wilderness values of the area would be foregone or adversely affected as a result of this use.

4. Public Comment: In determining whether an area is suitable or nonsuitable for wilderness designation, considerations will be given to comments received from interested and affected publics at all levels—local, state, regional, and national. The BLM will develop its recommendations by considering public comment in conjunction with a full analysis of a wilderness study area's multiple resource and social and economic values and uses.

5. Local Social and Economic Effects: In determining whether an area is suitable or nonsuitable for wilderness designation, the BLM will give special attention to any significant social and economic effects, as identified through the wilderness study process, which designation of the area would have on local areas.

6. Consistency With Other Plans: In determining whether an area is suitable or nonsuitable for wilderness designation, the BLM will fully consider and document the extent to which the recommendation is consistent with officially approved and adopted resource-related plans of other federal agencies, state and local governments, and Indian tribes (and the policies and programs contained in such plans).

The remainder of this chapter will discuss wilderness criteria and quality standards specifically applied to each WSA.

SELKIRK CREST (61-1, 720 Acres)

Mandatory Wilderness Characteristics

Naturalness: The area appears to be in an essentially natural state. There are no human imprints present in the area.

Solitude: The ability of the area to provide outstanding opportunities for solitude can only be assessed in conjunction with the adjoining RARE II area. By itself, the area offers limited opportunities for solitude due to a scattered vegetation pattern and a lack of distinct topographic variance.

When the adjoining 43,500 acres of RARE II Unit 1-125 are considered, the area provides outstanding opportunities for solitude for several reasons. The diverse topography of the area – mountainous, with numerous drainages – provides many opportunities for visitors to avoid each other. The vegetation in the area is adequate to screen visitors from one another. Movement between the RARE II unit and WSA is made easier because the two areas have a 2.9-mile common boundary. It is very easy for a visitor to find a secluded spot in the combined areas, although this opportunity is diminished if the WSA is considered by itself.

Human activity outside the boundary can be seen from almost anywhere in the WSA. The WSA lies on a steep mountainside with the panoramic Kootenai River valley below. Human impacts stem from farming activities in the valley which include plowed fields, occasional farmhouses, and distant roads. These impacts do not impose on the area's opportunity for solitude. The pastoral landscape of the valley has minimal influence on visitors in the WSA.

Primitive and Unconfined Recreation: The ability of the WSA to provide outstanding opportunities for primitive and unconfined types of recreation can only be assessed in conjunction with the adjoining RARE II area. By itself, the WSA offers only limited opportunities for primitive and unconfined recreation. The presence of only subtle topographic and vegetative diversity and the

lack of any prominent feature precludes any "outstanding" opportunity.

When the RARE II area and WSA are combined into one unit, there is the opportunity for a variety of recreation activities that would be considered outstanding. However, the opportunities still would not change in the WSA, and the opportunities for recreation in the RARE II area would not be increased with the addition of the WSA to the area.

Special Features

Most of the Kootenai River valley, including the WSA, has been identified as important winter range for white-tailed deer. Approximately 100 to 150 deer use the immediate area around the WSA for winter range. This use is considered significant.

Multiple Resources Benefits (benefits to other multiple resource values which only wilderness designation of the area would ensure).

After considering all the management alternatives for this WSA, no multiple resource benefits which depend solely on wilderness designation have been identified.

Diversity in the National Wilderness Preservation System

Expanding the diversity of natural systems and features, as represented by ecosystems and landforms: The Selkirk Crest WSA is located within the Columbia Forest Province; western ponderosa forest. The ecosystem is currently represented in four designated wilderness areas, three areas which have been administratively endorsed as wilderness, and five areas which are under study.

Expanding the opportunities for solitude or primitive recreation within one day's driving time (five hours) of major population centers: Consideration must be given to the opportunities for solitude or primitive recreation within one day's driving time (5 hours) of major population centers. The population centers used in this analysis are Spokane, Boise, Coeur d'Alene, Moscow-Pullman, and Lewiston-Clarkston. All of these cities are within one day's drive of at least one of the five WSAs. Spokane and Boise are Metropolitan Statistical Areas (MSAs). An MSA is defined as a population center of at least 50,000 inhabitants.

A figure of 200 miles is being used to represent a day's drive of 5 hours. Distances used are air miles with the assumption that in most cases this figure will equate to approximately 5 hours of driving time.

Table A-1 depicts the opportunities available within 200 miles of each population center. Areas considered were those currently in the NWPS, those administratively endorsed as wilderness, and those areas under study for inclusion within the NWPS. The number of areas and an approximation of the total acreage are shown for each category.

TABLE A-1
SOLITUDE OR PRIMITIVE RECREATION OPPORTUNITIES NEAR POPULATION CENTERS

	NWPS areas/acres	Endorsed areas/acres	Study areas/acres
Boise (MSA)	10/4.3 Million	26/1.5 million	147/5.1 million
Spokane (MSA)	14/4.6 million	30/2.6 million	25/400,000
Coeur d'Alene	18/6.8 million	34/2 million	36/800,000
Moscow-Pullman	16/5.9 million	37/2.3 million	39/1 million
Lewiston-Clarkston	12/4.3 million	36/1.4 million	48/1.4 million

Opportunities for solitude or primitive recreation are currently prevalent within one day's drive from all the major population centers considered. The potential exists for more than a threefold increase in these opportunities as a result of those areas already administratively endorsed as wilderness. Considering the existing and potential supply, there is no need to increase opportunities within one day's drive of these population centers.

Balancing the geographic distribution of wilderness areas: Inclusion of the Selkirk Crest WSA within the NWPS will not serve to further the objective of this factor. The Northern Rocky Mountain region contains one of the largest concentrations of designated and proposed wilderness areas within the country. The addition of this WSA to the NWPS will increase this concentration instead of balancing the distribution of wilderness.

CRITERION 2 - MANAGEABILITY

The capability of the Selkirk Crest WSA to provide a sustained level of wilderness-related use is totally dependent upon the adjacent Forest Service RARE II area. The value of the WSA is in providing a more cohesive unit of public land.

QUALITY STANDARDS

Energy and Mineral Resource Values

No known energy or mineral resource values exist in this WSA and there are no mining claims, leases, or pending applications for leasable minerals. Exploration and potential development opportunities would be foregone as of the date of designation, should this WSA be designated a wilderness area. However, development of existing valid claims would be permitted.

Impacts on Other Resources

Wilderness designation of this WSA would cause no significant adverse impacts to air quality, soil, water quality, vegetation, wildlife, cultural resources, scenic values, or recreation.

Livestock grazing: There would be no adverse impacts on livestock grazing since none occurs or is anticipated on this WSA .

Timber management: While wilderness designation of this WSA would eliminate all opportunities for timber management, this would be a negligible impact since this WSA contains a standing volume of only .7 million board feet of poor quality timber.

Impacts of Nondesignation on Wilderness Values

The preferred alternative (No Action/No Wilderness) would adversely affect the values of naturalness and solitude by permitting recreational ORV use. This would be a very slight impact since such use is less than 10 visitor days annually.

Public Comment

Very little public comment was received concerning this WSA. Letters of comment and our responses to them are located in Chapter 5 of this document.

Local Social and Economic Effects

Designation of this WSA as wilderness would not effect the social and/or economic values of the local area.

Consistency With Other Plans

The preferred alternative is consistent with other officially approved and adopted resource-related plans.

SUITABILITY/NONSUITABILITY SUMMARY

Our evaluation indicates that the Selkirk Crest WSA is nonsuitable for wilderness designation for three reasons: With only 720 acres of land, this unit could never stand on its own as a wilderness area. Any potential for wilderness suitability is directly contingent upon the designation of the adjacent U.S. Forest Service RARE II area as wilderness. This adjacent area has not been recommended for wilderness designation.

CRYSTAL LAKE (61-10, 9,027 acres)

CRITERION 1 - EVALUATION OF WILDERNESS VALUES

Mandatory Wilderness Characteristics

Naturalness: While the unit is in an essentially natural state, there is one human imprint which may reduce the subjective quality of this natural appearance. This imprint is a "way" which stretches for 1.5 miles in the extreme eastern portion of the WSA. The way is now overgrown and impassable. Natural revegetation has reduced the visual impacts of the road cut, though it does not significantly limit the way's visibility.

The way is visible only from certain areas within the southern portion of the WSA. This area encompasses approximately 2,000 acres and contains Crystal Lake. Crystal Lake receives most of the use within the WSA. Reeds Baldy, a prominent peak, is also located here. These two features, along with ease of access, serve to make this area the focal point of use in the Crystal Lake WSA.

There is one other way within the WSA, a 1/2-mile route in the northeast corner of the unit. This way would not significantly affect the perceived quality of naturalness since it is difficult to see as it is well screened by topography and forest.

This WSA is vulnerable to management practices on adjacent non-BLM land. This is particularly significant outside of the northwest portion of the area where an intermingled pattern of state and private land exists. Timber harvest and other land-altering activities are visible from many portions of the WSA. Depending upon the intensity of future actions, the effect may be significant upon user perceptions of naturalness. This same situation exists to the south and west of the WSA. Actions within this area are visible from fewer locations within the WSA and will therefore constitute a less significant impact.

Solitude: Under conditions of moderate and dispersed use, the heavily forested areas (approximately 3,700 acres) within the WSA provide an outstanding opportunity for solitude due to vegetative screening. The trend of increased visitor use would make it more difficult to isolate oneself from the sights and sounds of other users due to the relative small size of the WSA and limited vegetative and topographic screening.

Activities on adjacent lands (see naturalness discussion) could diminish outstanding opportunities for solitude available to users in the Crystal Lake WSA.

Primitive and Unconfined Recreation: The Crystal Lake WSA offers a diversity of possible activities. The more prominent among these are fishing, cross-country skiing, hiking, hunting, and nature study.

The range of landform and vegetation, from bare peaks to heavily forested creek bottoms, provides a broad base which can meet the needs of these varied activities. Fishing opportunities include both stream and lake. Cross-country skiing within the WSA accommodates a wide range of skill levels. The variety of environments maintain visual interest for both the hiker and those involved in nature study.

Special Features

The Crystal Lake WSA contains features which have both cultural and educational values. These features consist of the Skitswish Monuments located along the ridges surrounding the majority of the area. The Skitswish Monuments are associated with the religious ceremonies of the Cœur d'Alene Indians.

Multiple Resource Benefits (benefits to other multiple resource values which only wilderness designation of the area would ensure)

After considering all the management alternatives for this WSA, no multiple resource benefits which depend solely on wilderness designation have been identified.

Diversity in the National Wilderness Preservation System

Expanding the diversity of natural systems and features, as represented by ecosystems and landforms: The Crystal Lake WSA is located within the Columbia Forest Province; western spruce-fir forest. The ecosystem is currently represented in nine designated wilderness areas, twenty-three areas which have been administratively endorsed as wilderness, and seven areas which are under study.

Expanding the opportunities for solitude or primitive recreation within one day's driving time (five hours) of major population centers: Opportunities for solitude or primitive recreation are currently prevalent within one day's drive from all the major population centers considered. The potential exists for more than a threefold increase in these opportunities as a result of those areas already administratively endorsed as wilderness. Considering the existing and potential supply, there is no need to increase opportunities within one day's drive of these population centers (refer to Table A-1).

Balancing the geographic distribution of wilderness areas: Inclusion of the Crystal Lake WSA within the NWPS will not serve to further the objective of this factor. The Northern Rocky Mountain region contains one of the largest concentrations of designated and proposed wilderness areas within the country. The addition of this WSA to the NWPS will increase this concentration instead of balancing the distribution of wilderness.

CRITERION 2 - MANAGEABILITY

If the current levels of use within this WSA were maintained and if current levels of activity on adjacent non-BLM lands were to continue, the Crystal Lake WSA could be effectively managed as a wilderness area. However, two factors would adversely affect BLM's ability to effectively manage this WSA as wilderness in the long-term. First, usage of this WSA is increasing each year. These increases will reduce user perceptions of naturalness and affect outstanding opportunities for solitude since adequate topographic and vegetative screening is not available to isolate users from the sights and sounds of other users. Secondly, activity on adjacent non-BLM lands is increasing. This increase in activity is most evident on those state and private lands northwest of the WSA where timber harvesting activities are occurring. Long range plans for these adjacent lands indicate that non-complimentary activities will increase in the future.

Management activities could be designed to ameliorate the problems associated with increased usage, however, actions on adjacent lands are not under the control of BLM even though they adversely affect the maintenance of wilderness characteristics in this WSA.

QUALITY STANDARDS

Energy and Mineral Resource Values

No known energy or mineral resource values exist in this WSA. There are no mining claims, leases, or pending applications for leasable minerals. Undiscovered resources of mineral-bearing material (silver, lead, zinc, copper, etc.) are surmised to exist in this WSA on the basis of broad geologic knowledge and theory. The fault zones within the unit and favorable host rocks of the lower Belt Supergroup are similar to those in the Coeur d'Alene Mining District. These conditions will probably lead to a greater demand by exploration companies as new techniques are developed. Exploration and potential development opportunities would be foregone following designation, should this WSA be designated a wilderness area. However, development may continue on existing valid claims.

Impacts on Other Resources

Wilderness designation of this WSA would cause no significant adverse impacts to air quality, soil, water quality, vegetation, wildlife, cultural resources, scenic values, or recreation.

Livestock grazing: Wilderness designation of this WSA would cause no adverse impacts on livestock grazing.

Timber management: Wilderness designation of this WSA would eliminate all opportunities for timber management. This WSA contains 4,931 acres of productive forest land supporting a standing volume of 45.8 million board feet.

Impacts of Nondesignation on Wilderness Values

The preferred alternative (Outstanding Natural Area) would not adversely affect wilderness values. Under ONA management, the area would be managed so that no actions which would detract from the quality of its natural features would be permitted. The area would be closed to motorized vehicles and timber management activities would not be allowed.

All wilderness values would be lost on those areas allocated for intensive timber management under the No Action/No Wilderness alternative.

Public Comment

Written comments relative to this WSA were received in response to review of the Draft MFP Amendment/EIS. Oral comments were received at the public meetings and formal public hearing. Of the 66 respondents who specifically commented on this WSA (either in writing or orally), 33 favor wilderness designation while 33 prefer no wilderness for this area. Six other commenters oppose any wilderness designations regardless of the area. Three people mentioned this WSA in testimony at the public hearing. All three favored no wilderness.

Three government agencies submitted written comments concerning this WSA. The Bureau of Indian Affairs urged continued coordination with local Indian tribes and the State of Idaho Department of Lands expressed an opinion concerning future land use allocations within this WSA. The Idaho Department of Fish and Game supports our preferred alternative for this WSA.

Letters of comment and our responses to them are located in Chapter 5 of this document.

Local Social and Economic Effects

Designation of this WSA as wilderness would not cause any significant social and economic effects on the local area. A potential annual harvest of 830 thousand board feet of timber from 4,931 acres of commercial forest land would be foregone.

Consistency With Other Plans

The preferred alternative is consistent with other officially approved and adopted resource-related plans.

SUITABILITY/NONSUITABILITY SUMMARY

Our evaluation indicates that the Crystal Lake WSA is nonsuitable for wilderness designation for three reasons:

1. Although this area does contain wilderness characteristics, its ecosystem is currently represented in nine designated areas in the NWPS and in twenty-three areas which have been administratively endorsed as wilderness.
2. The addition of this WSA to the NWPS would increase the concentration of wilderness in the Rocky Mountain region rather than balance the distribution of wilderness on a national or regional basis.
3. Under current conditions, wilderness management of this WSA would be feasible. However, effective long-term management as wilderness would be impractical, largely due to increasing levels of man's activities on adjacent non-BLM lands which adversely affect user perceptions of naturalness and solitude.

GRANDMOTHER MOUNTAIN (61-15, 17,129 acres)

CRITERION 1 - EVALUATION OF WILDERNESS VALUES

Mandatory Wilderness Characteristics

Naturalness: Evidence of human activity from limited timber harvest is found in several locations within the WSA. Stumps are scattered throughout the area with no major concentrations in any one location, and harvest activity is hardly noticeable due to overgrowth. Snow-covered skid trails are visible from higher elevations due to the contrast from the more heavily forested areas. Under any circumstances, these skid trails have insignificant impact upon the natural character of the area.

Evidence of human activity outside of the WSA boundary is plentiful. The location of this evidence ranges from near the border to several miles away. These activities consist primarily of past and on-going timber sales. Clearcuts offer the most significant visual evidence. Numerous roads are also visible.

Whether or not these impacts are visible will depend upon the user's location within the area and the extent to which screening is present. At least some of these impacts will be visible near the WSA boundaries and from most peaks and ridges. Views of outside impacts are more widely available in the westernmost portion of the unit. This is largely a result of this area's narrow configuration.

Established trails within the Grandmother Mountain area are predominately found along ridgelines. Use of these trails will therefore expose users to the presence of outside impacts. Destinations within the WSA are more likely to be located off the ridges where these impacts are largely unnoticeable.

Visitors to this WSA spend more time at destinations than on travel routes. This would indicate that outside impacts, though at times visible, may not play a significant role in shaping user perceptions of naturalness in the majority of the WSA. Within the westernmost portion of the unit, these impacts may be more significant. This is due to the widespread presence of outside impacts and few features which serve as destination points.

Solitude: An outstanding opportunity for solitude exists in Unit 61-15a. The area is heavily vegetated, and the terrain is frequently broken by small drainages. The resultant screening affords an almost unlimited opportunity for users to isolate themselves from one another. Unlike 61-15b, the opportunities within 61-15a are not dependent upon adjoining land to be considered outstanding. The effect of outside impacts upon the perception of solitude within 61-15a is minimal.

Unit 61-15b (see Map 1-3) is split by the ridgeline which runs northeast from Grandmother Mountain and passes through sections 22, 23, 14, and 11.

The configuration of Unit 61-15b, which contains 4,540 acres, is extremely irregular and narrow as a result of an intermingled land ownership pattern. This situation confines users to a narrow corridor, increasing the chance of encountering other users. The screening available from both topography and vegetation cannot offset the inherent limitation of this configuration. Evidence of human imprints outside of the WSA plays a significant role in the perception of solitude in 61-15b. This evidence consists primarily of timber harvests. Clearcuts offer the most visual evidence of man's occupation, though numerous roads are also visible from this area. Much of the land bordering the area has been used for timber production. This pattern of development is expected to continue and spread. The amount of existing visible evidence is sufficient to preclude the perception of this area as a lonely or secluded place. Additional impacts can only intensify this feeling.

Continued outstanding opportunities for solitude on those portions of this WSA which border National Forest lands are dependent upon the management of those lands. This is especially true for the 2,250 acres of 61-15b east of the primary ridgeline. A final management plan has not been completed for the National Forest lands in this area which essentially separate units 61-15a and 61-15b. The draft plan contains an alternative which would protect the naturalness and opportunities for solitude in this area.

Primitive and Unconfined Recreation: Unit 61-15a offers a diversity of possible activities. The more prominent among these are hiking, hunting, fishing, cross-country skiing, primitive camping, and nature and wildlife observation. The range of landform and vegetation, from bare peaks to dense forest, provides a broad base which can meet the needs of these varied activities.

The variety of environments maintain visual interest for both the hiker and those involved in nature study. Hunting opportunities exist for elk, deer, moose, bear, and upland game. Fishing is available in the area's lakes and numerous small streams. The large amount of snow and the relatively inaccessible nature of the area during the winter provide a challenging setting for the cross-country skier.

The opportunities available in 61-15b are comparatively less than those in 61-15a. While the same activities may be pursued in each area, the quality of the experience is less than that in 61-15a. Those factors which limit the quality of experience are a lack of features which would

enhance primitive recreation activities, the confining configuration of the area, and the exposure of outside impacts.

Opportunities within the 2,250 acres east of the ridge and trail running northeast from Grandmother Mountain are dependent upon the adjacent National Forest.

Special Features

The Lund Creek drainage, 2,905 acres in the southeastern portion of the WSA, is important because of its vegetative diversity. Old growth hemlock and subalpine fir forests constitute the major interest, but equally important are the aquatic environments of wet meadows, marshes, sphagnum bogs, and streams. In recognition of this diversity of vegetative communities, this area has been proposed for Research Natural Area designation for over ten years by BLM, the University of Idaho, and the Idaho Natural Areas Coordinating Committee.

Another special feature of this WSA is the Little North Fork of the Clearwater River, one and one-half miles of which, including its headwaters at Fish Lake, are within the Grandmother Mountain WSA. This river is currently under study for inclusion in the National River System. These special features would be protected under the preferred alternative.

Multiple Resource Benefits (benefits to other multiple resource values which only wilderness designation of the area would ensure)

After considering all the management alternatives for this WSA, no multiple resource benefits which depend solely on wilderness designation have been identified.

Diversity in the National Wilderness Preservation System

Expanding the diversity of natural systems and features, as represented by ecosystems and land-forms: The Grandmother Mountain WSA is located within the Columbia Forest Province, cedar-hemlock-pine forest. This ecosystem is currently represented in one designated wilderness area and seven areas which have been administratively endorsed as wilderness. This ecosystem is not in need of additional representation within the NWPS.

Expanding the opportunities for solitude or primitive recreation within one day's driving time (five hours) of major population centers: Within a five hour drive (200 air miles) of the closest major population center, the Spokane area, opportunities for solitude and primitive recreation currently exist in 14 designated wilderness areas encompassing 4.6 million acres of land. Considering the existing supply, there is no need to increase opportunities for solitude or primitive recreation. Refer to Table A-1 and the accompanying narrative.

Balancing the geographic distribution of wilderness areas: Inclusion of this WSA in the NWPS would tend to add to the geographic imbalance of wilderness areas in the United States.

CRITERION 2 - MANAGEABILITY

Most of the Grandmother Mountain WSA could be managed as wilderness. The primary exception would be the western portion of unit 61-15b (4,540 acres) which is very vulnerable to the adverse influences of land-altering activities on adjacent non-BLM lands. The irregular, narrow configuration of this unit forces visitors to use areas from which activities outside the WSA are visible. The pattern of development on the adjacent non-BLM lands is expected to continue and spread. This trend, when combined with the configuration of the western portion of the WSA, would make long-term preservation of opportunities for solitude and primitive recreation impractical.

A small portion of 61-15b (2,250 acres east of the Grandmother Mountain trail) would be dependent upon wilderness-compatible management of the adjacent National Forest lands in the Marble Creek drainage to ensure effective long-term management as wilderness.

The remainder of the WSA (10,339 acres) could be managed as wilderness with out consideration of actions on adjacent lands. Compatible management of these adjacent lands would, however, enhance long-term wilderness management. Although the National Forest lands in the Marble Creek drainage have been designated non-wilderness through the RARE II process, the draft plan for the area contains at least one alternative which proposes wilderness-compatible management.

QUALITY STANDARDS

Energy and Mineral Resource Values

No known energy or mineral resource values exist in this WSA. There are no mining claims, leases, or pending applications for leasable minerals. The entire WSA has identified undiscovered resources for garnet, asbestos, refractories, and anorthosite.

At the present time there is an increased emphasis toward U.S. production of strategic and critical minerals. Some of these minerals have been identified within the unit, and as new exploration techniques are developed and other deposits are depleted or become uneconomic, there will be a greater demand for exploration.

Exploration and potential development opportunities would be foregone following designation, should this WSA be designated a wilderness area. However, development may continue on existing valid claims.

Impacts on Other Resources

Wilderness designation of the Grandmother Mountain WSA would cause no significant adverse impacts to air quality, soil, water quality, vegetation, wildlife, cultural resources, scenic values, recreation, or livestock grazing.

Timber management: Wilderness designation of this WSA would eliminate all opportunities for timber management. This WSA contains 12,244 acres of productive forest land supporting a standing volume of 157 million board feet.

Impacts of Nondesignation on Wilderness Values

The preferred alternative (Timber, ONA, and RNA) would adversely affect wilderness values on the 4,540 acres allocated for intensive timber management. Timber management would impair the naturalness of the area and the opportunities for solitude and primitive recreation. These impacts would be compounded by the timber management related impacts on the adjacent non-BLM lands. Most wilderness values would be maintained on the remaining 12,589 acres, however, naturalness and opportunities for solitude could be slightly affected by mineral exploration activities. In addition, opportunities for solitude could be adversely affected on the 9,684 acres designated as an ONA since motorized vehicles would be permitted in most areas. Current mineral exploration and motorized vehicle usage of this WSA is very limited.

All wilderness values would be lost under the other alternatives considered for this WSA on those lands allocated for intensive timber management.

Public Comment

Written comments relative to this WSA were received in response to review of the Draft MFP Amendment/EIS. Oral comments were received at the public meetings and formal public hearing. From the comments received, this WSA appears to be the most controversial of the four studied.

Timber companies and related interest groups are totally opposed to any further wilderness designations or any other forms of restrictive designations for this WSA. Environmental groups feel the Grandmother Mountain WSA is the last vestige of wilderness in a sea of clearcuts and destruction. They feel the only real protection for this area is through wilderness designation. These two factions are very determined and vocal.

Of the 89 respondents who specifically commented on this WSA (either in writing or orally), 47 favor wilderness designation, 38 prefer no wilderness for this area, and 4 prefer partial wilderness for this WSA. Six other commenters oppose any further wilderness designations regardless of the area. All six of the speakers at the public hearing favored wilderness designation. The Idaho Department of Fish and Game supports our preferred alternative for this WSA.

Public input received throughout the study process was considered during the development of the preferred alternative.

Letters of comment on the Draft EIS and our responses to them are located in Chapter 5 of this document.

Local Social and Economic Effects

Designation of this WSA as wilderness would eliminate the potential for economic gains which would occur if the entire area was managed for timber production. A potential annual harvest of 2.1 million board feet would be foregone. Designation would not cause any significant social effects on the local area.

Consistency With Other Plans

The preferred alternative is consistent with proposed plans on non-BLM lands. There are no officially approved and adopted resource-related plans in place.

SUITABILITY/NONSUITABILITY SUMMARY

Our evaluation indicates that the Grandmother Mountain WSA is nonsuitable for wilderness designation for the following reasons:

1. The ecosystem present in the Grandmother Mountain WSA is not in need of additional representation within the NWPS. It is currently represented in one designated wilderness area and seven administratively endorsed areas. Inclusion of this WSA in the NWPS would not expand the diversity of natural systems and features.
2. The addition of this WSA to the NWPS would increase the concentration of wilderness in the Northern Rocky Mountain region rather than balance the distribution of wilderness throughout the United States. Opportunities for solitude and primitive recreation are currently prevalent within a one day's drive from all major population centers in the area. Additional wilderness designations are not necessary to ensure continued opportunities for solitude and primitive recreation within a reasonable distance from major population centers.
3. While the above listed reasons are the primary reasons for a nonsuitable determination for

this WSA, long-term manageability of wilderness values would be impractical on the western 4,540 acres of this WSA. Refer to the Manageability discussion for further details.

SNOWHOLE RAPIDS (62-1, 5,068 acres)

CRITERION 1 - EVALUATION OF WILDERNESS VALUES

Mandatory Wilderness Characteristics

Naturalness: Evidence of human activity is present throughout the WSA. This evidence is largely the result of mining and domestic livestock grazing activities.

Within the WSA, there are no heavy concentrations of impacts which might impair the feeling of being in a natural environment. Whitehouse Bar contains most of the impacts within the WSA. Several old cabins are found along either side of the river. An old road, suitable only as a pack trail, extends down to the river on the south bank. None of these features constitutes a significant impact upon naturalness.

Other intrusions within the WSA consist of widely scattered, small tailings piles and small rock structures. These impacts are the result of Chinese mining activity which occurred between 1860 and 1880.

Visitor use is centered around the river and its immediate banks. Infrequent use occurs beyond this narrow corridor. From certain locations along the river, outside impacts along the rim of the canyon can be seen. Activities which occur on land adjacent to the WSA have had little effect on users within the area. However, anticipated increases in activity on adjacent lands could adversely impact user perceptions of naturalness within the WSA.

Solitude: At current use levels, an outstanding opportunity for solitude exists within the Snowhole Rapids WSA. Primary use of the WSA is recreational activity centered around boating on the Salmon River. The river banks, where suitable, are only used for campsites or for short stops. Since visitor use is generally limited to a narrow corridor, opportunities for encountering other users increase.

The outstanding opportunity for solitude can be maintained under conditions of low and evenly distributed use. However, use on the lower Salmon River has more than tripled within the past five years. A continuation of this trend would result in diminished opportunities for solitude.

Power boat use of the river within the WSA detracts from user perceptions of solitude. To date this use has not played a significant role in reducing the overall opportunities for solitude in this WSA; however, trends of increased use indicate that significant reductions in opportunities for solitude could result.

Primitive and Unconfined Recreation: The Salmon River is widely recognized as an outstanding whitewater rafting river. Activities associated with river rafting may include fishing, sightseeing, and hiking.

Special Features

Historic evidence of man's periodic occupation of the area is prevalent.

The Salmon River is also an important passage route for anadromous fish.

Multiple Resource Benefits (benefits to other multiple resource values which only wilderness designation of the area would ensure)

After considering all the management alternatives for this WSA, no multiple resource benefits which depend solely on wilderness designation have been identified.

Diversity in the National Wilderness Preservation System

Expanding the diversity of natural systems and features, as represented by ecosystems and landforms: The Snowhole Rapids WSA is located within the Palouse Grassland Province; wheatgrass-bluegrass. This ecosystem is not represented by a designated or administratively endorsed wilderness. There are five other areas under study for wilderness which contain this ecosystem. The WSA can meet the objective of this criteria by representing this ecosystem in NWPS.

Expanding the opportunities for solitude or primitive recreation within one day's driving time (five hours) of major population centers: Table A-1 depicts the availability of opportunities for solitude or primitive recreation near population centers. Considering the existing supply, there is no need to increase such opportunities.

Balancing the geographic distribution of wilderness areas: Inclusion of the Snowhole Rapids WSA within the NWPS will not serve to further the objective of this factor. The Northern Rocky Mountain region contains one of the largest concentrations of designated and proposed wilderness areas within the country. The addition of this WSA to the NWPS will increase this concentration instead of balancing the distribution of wilderness.

CRITERION 2 - MANAGEABILITY

Long-term management of this WSA as wilderness would not be feasible. Increased activity on adjacent non-BLM lands would reduce the naturalness quality of this area. The opportunities for solitude would be reduced significantly if the trend of increased use of the Salmon River continues as it has since 1975.

While effective means to control wilderness value degradation through visit or use management are available for most upland wilderness areas, techniques (both indirect and direct) to minimize visitor encounters and interaction would not be practical for this WSA. This is due to a number of factors: 1) the river canyon configuration of this WSA concentrates users in a narrow corridor; 2) use of this WSA is centered around one major activity (boating and rafting); 3) topographic and vegetative screening is insufficient in the corridor of high use; 4) use of this navigable river is basically unmanaged both upstream and downstream of the WSA; and 5) power boat use of the river is an established nonconforming use that, by its very nature, intrudes upon opportunities for solitude.

QUALITY STANDARDS

Energy and Mineral Resource Values

No significant energy or mineral values exist in this WSA. There are no mining claims, leases, or pending applications for leasable minerals.

At the present time there is an increased emphasis toward U.S. production of strategic and critical minerals. The area is identified as an undiscovered resource for base metals, namely gold and silver. With these conditions there will be a greater demand for exploration as new technologies are developed and when other deposits are depleted or become uneconomic.

Exploration and potential development opportunities would be foregone following designation, should this WSA be designated a wilderness area.

Impacts on Other Resources

Wilderness designation of the Snowhole Rapids WSA would cause no significant adverse impacts on other resource values.

Impacts of Nondesignation on Wilderness Values

Under the preferred alternative (No Action/No Wilderness) wilderness values would be susceptible to the same degradation potential as would likely occur under the All Wilderness alternative.

Public Comment

Written comments relative to this WSA were received in response to the Draft MFP Amendment/EIS. Oral comments were received at the public meetings. No comments specifically directed to this WSA were made at the public hearing.

Of the 31 respondents who specifically commented on this WSA (either in writing or orally), 19 favor wilderness designation while 12 prefer no wilderness for this area. Six commenters oppose any further wilderness designations regardless of the area. The Idaho Department of Fish and Game submitted a letter supporting our recommendation for this WSA. No other government agencies commented specifically about this WSA. The Nez Perce Indian Tribe commented that they had all rights to the waters of the Salmon River and that this WSA should be returned to their control.

Public input received throughout the study process was considered during the development of the preferred alternative.

Letters of comment on the Draft EIS and our responses to them are located in Chapter 5 of this document.

Local Social and Economic Effect

Designation of this WSA as wilderness would not cause any significant social and economic effects on the local area.

Consistency With Other Plans

The preferred alternative is consistent with other officially approved and adopted resource-related plans.

SUITABILITY/NONSUITABILITY SUMMARY

Our evaluation indicates that the Snowhole Rapids WSA is nonsuitable for wilderness designation for the following reasons:

1. The addition of this WSA to the NPS would increase the concentration of wilderness in the Rocky Mountain region rather than balance the distribution of wilderness on a national or regional basis.
2. Long-term management of this WSA as wilderness would not be feasible. This conclusion is based on three major factors:

A. Increasing activity on adjacent non-BLM lands is visible from the river and many other points in the WSA and tends to reduce user perceptions of naturalness and solitude. The incidence of these visual intrusions will increase over the long-term.

B. Since 1975, use of the Salmon River by recreationists has tripled. This trend is continuing and results in reduced opportunities for solitude since almost all the use of this WSA is concentrated in the narrow river corridor where topographic and vegetative screening is insufficient to isolate users from one another.

C. Indirect or direct management techniques designed to disperse visitor use and minimize user encounters with each other would not be practical since use of the navigable river which flows through the WSA could not be controlled to a point where wilderness values would not be adversely impacted by increased use. This is compounded by the concentration of visitor use along the river, unmanaged segments of the river both upstream and downstream of the WSA, and the non-conforming allowable use of power boats. It would be impractical to stop river users at the boundary of the WSA simply because the carrying capacity necessary to ensure the preservation of wilderness values has been exceeded.

MARSHALL MOUNTAIN (62-10, 5,804 acres)

CRITERION 1 - EVALUATION OF WILDERNESS VALUES

Mandatory Wilderness Characteristics

Naturalness: The Marshall Mountain area appears to be in an essentially natural condition. There has been extensive prospecting in the area, much of it occurring 30 to 50 years ago. However, most prospecting involved small test holes or other activities that left very little impact on naturalness.

There are a few abandoned mines and prospects scattered throughout the area, most of which have a tailings pile in the vicinity of the entrance. These have been found in sections 18 and 22. The impact on naturalness from these mines and prospects is very localized due to the heavy forest cover that screen them. They are definitely safety hazards.

Solitude: There is a cherrystemmed area (see Glossary) in the Bear Creek drainage containing several active mining operations. Frequent truck travel occurs along the Bear Creek road. Heavy equipment and air compressors often accompany these mining operations. The noise of this equipment is loud and inescapable in much of the Bear Creek drainage. When in range of these noises, it is impossible for a visitor to feel alone or removed from habitations. The loss of opportunities for solitude in Bear Creek occurs in portions of sections 8, 9, and 10 and encompasses about 450 acres.

There is another active mining operation in the Southwest Quarter of section 23. This operation is just outside the WSA boundary on National Forest land. The loss of opportunities for solitude as a result of this mine occurs in section 22 and encompasses about 50 acres.

The remaining 5,304 acres of the WSA currently contain outstanding opportunities for solitude. The broken, mountainous landscape offers many opportunities for visitors to isolate themselves from others. Dense forests that cover much of the area effectively screen visitors from each other.

Increased mining activity, both within and outside the WSA, would adversely affect naturalness and solitude values.

Primitive and Unconfined Recreation: The outstanding opportunity for primitive and unconfined types of recreation is centered around the unit's suitability for backcountry camping activities. Recreation opportunities include hiking, backpacking, hunting, wildlife observation, photography, and sightseeing. The diversity of these activities is considered outstanding.

Special Features

This WSA is part of the historic Marshall Mountain Mining District. According to ELM records, there are two mill sites and over 150 lode mining claims within the WSA.

Multiple Resource Benefits (benefits to other multiple resource values which only wilderness designation of the area would ensure)

Wilderness designation of this WSA would benefit soil, water quality, wildlife, and visual quality by preventing potential adverse impacts resulting from possible increased mining activity.

Diversity in the National Wilderness Preservation System

Expanding the diversity of natural systems and features, as represented by ecosystems and land-forms: The Marshall Mountain WSA is located within the Columbia Forest Province; grand fir-Douglas fir forest. This ecosystem is currently represented in four designated wilderness areas and two areas which have been administratively endorsed as wilderness. This ecosystem is not in need of additional representation within the NWPS.

Expanding the opportunities for solitude or primitive recreation within one day's driving time (five hours) of major population centers: Table A-1 depicts the availability of opportunities for solitude or primitive recreation near population centers. Considering the existing supply, there is no need to increase such opportunities.

Balancing the geographic distribution of wilderness areas: Inclusion of the Marshall Mountain WSA within the NWPS will not serve to further the objective of this factor. The Northern Rocky Mountain region contains one of the largest concentrations of designated and proposed wilderness areas within the country. The addition of this WSA to the NWPS will increase this concentration instead of balancing the distribution of wilderness.

CRITERION 2 - MANAGEABILITY

With the exception of those areas discussed in the Solitude section, this WSA could currently be managed as a wilderness area. The ability to manage this area for wilderness in the long-term is questionable. In the Marshall Mountain area, gold and other minerals have been economically mined in the past. For this reason, the WSA is saturated with mining claims (over 150). Should the price of these minerals escalate and/or new cost-effective technologies become available, it will become economically feasible for many claimants to actively pursue or resume mining operations in this WSA. The impacts associated with numerous active mining operations would degrade wilderness values. The severity of this degradation would be dependent upon the magnitude, intensity, and incidence of new or resumed mining operations.

Mining activity in the vicinity of the WSA is currently depressed due to the high costs of production relative to the market value of the minerals. Should this WSA be designated a wilderness area during this time of depressed mineral development, the potential for further degradation of wilderness values would be eliminated and the area would be manageable in the long-term as wilderness.

QUALITY STANDARDS

Energy and Mineral Resource Values

According to the USGS map, "Land Valuable for Geothermal Resources", this area may be valuable for geothermal resources. There are no known mineral values for leasable or saleable minerals; however, this area has been classified as having identified undiscovered resources for base metals, gold, and silver. There are numerous active mines near or adjacent to the WSA. There is a large inferred demand for mineral production or exploration within the WSA based upon the number of mining claims.

Exploration and new development resulting from that exploration would be foregone following designation, should this WSA be designated a wilderness area. However, development work, extraction, and claim patenting will be allowed to continue on valid claims.

Impacts on Other Resources

Wilderness designation of the Marshall Mountain WSA would cause no significant adverse impacts to air quality, soil, water quality, vegetation, wildlife, cultural resources, scenic values, recreation, or livestock grazing.

Timber management: Wilderness designation of this WSA would eliminate all opportunities for timber management. This WSA contains 3,920 acres of productive forest land supporting a standing volume of 44 million board feet.

Impacts of Nondesignation on Wilderness Values

The preferred alternative (No Action/No Wilderness) would allow mineral development throughout the WSA. The potential exists for significant adverse impacts to wilderness values (naturalness and solitude) resulting from mining and associated activities. In addition, opportunities for solitude could be adversely affected by motorized vehicles which would be permitted under the preferred alternative.

Wilderness values would be lost on those lands allocated for intensive timber management under the Timber Emphasis and Partial Wilderness alternatives.

Public Comment

Written comments relative to this WSA were received in response to the Draft MFP Amendment/EIS.

Oral comments were received at the public meetings. No comments specifically directed to this WSA were made at the public hearing.

Of the 31 respondents who specifically commented on this WSA (either in writing or orally), the majority, 27, favored no wilderness for this WSA while 4 indicated a preference for wilderness designation. Six commenters oppose any further wilderness designations regardless of the area. The Idaho Department of Fish and Game submitted a letter supporting our preferred alternative for this WSA. No other government agencies commented specifically about this WSA. The Nez Perce Indian Tribe commented that they had all rights to the waters of the Salmon River and that this WSA should be returned to their control.

Public input received throughout the study process was considered during the development of the preferred alternative.

Letters of comment on the Draft EIS and our responses to them are located in Chapter 5 of this document.

Local Social and Economic Effects

Designation of this WSA as wilderness would eliminate the potential for economic gains which would occur if the 3,920 acres of productive forest lands were managed for timber production. A potential annual harvest of 724 thousand board feet would be foregone. In addition, potential revenues from mineral production would also be foregone.

Designation would not cause any significant social effects on the local area.

Consistency With Other Plans

The preferred alternative is consistent with local, state, and federal plans.

SUITABILITY/NONSUITABILITY SUMMARY

Our evaluation indicates that the Marshall Mountain WSA is nonsuitable for wilderness designation for the following reasons:

1. Although this WSA does contain wilderness characteristics, its ecosystem currently is represented in four designated wilderness areas and two administratively endorsed areas. Inclusion of this WSA in the NWPS would not expand the diversity of natural systems and features.
2. The addition of this WSA to the NWPS would increase the concentration of wilderness in the Northern Rocky Mountain region rather than balance the distribution of wilderness throughout the United States. Opportunities for solitude and primitive recreation are currently prevalent within a one day's drive from all the major population centers in the area. Additional wilderness designations are not necessary to ensure continued opportunities for solitude and primitive recreation within a reasonable distance from major population centers. Exceptional opportunities to enjoy wilderness experiences are currently available in close proximity to this WSA as it adjoins the River of No Return Wilderness Area.

The question of manageability was not considered as a rationale for the nonsuitable recommendation for this WSA since any loss of wilderness management capabilities would result only if certain uncontrollable variables interacted at the proper time to renew interest in mineral production activities. There is no way to assess the probability of this occurring.

APPENDIX 2

APPENDIX 2

APPENDIX 2

MANAGEMENT GUIDELINES

The goal of the following guidelines is to mitigate adverse environmental impacts to the lowest possible level. They were developed during the MFP preparation process and have been adopted as standard operating procedures for the Coeur d'Alene District. These guidelines would be applied, where appropriate, to any actions proposed under the alternatives.

TIMBER MANAGEMENT

Intensive-Extensive Timber Management

Lands allocated for intensive-extensive timber management would be managed to maximize timber production on a sustained yield basis. Timber harvest would be the primary goal of management activities on these lands.

Timberlands placed in the intensive-extensive category are suitable for continuous timber production with reasonable assurance of successful results from the application of timber management practices.

Generally, these lands are Timber Production Capacity Classification (TPCC) rated "non-problem" or "restricted productive" and would satisfactorily respond to thinning, fertilization and planting.

TPCC is an intensive timber inventory which classifies timber production sites. Elevations are usually below 5,000 feet with slopes less than 60 percent. The following management practices are guidelines only. Their application would vary as site-specific needs dictate.

Timber Harvest

Any harvest method, including clearcutting (removal of the entire stand in one cut), would be permitted on northeast, north, and northwest aspects, where not restricted by TPCC. The average size for a clearcut based on a 10-year period would be 20 acres. The maximum size would not exceed 60 acres for any single clearcut unit.

On all other aspects (west, south, and east), only partial or selective cutting methods would be used. Seed tree and shelterwood systems would be the most common harvest methods on these aspects. Both methods remove the stand in two cuts spaced about 10 years apart. In the seed tree system, 80 to 90 percent of the stand is removed with the first cut compared to 50 to 60 percent for shelterwood systems. The shelterwood system is used in areas where heat and drought pose problems. Slash disposal would take place after the first cut to prepare the seedbed for natural regeneration. The final cut is made after seedling establishment.

Individual tree selection would be used as required on TPCC restricted areas. Individual tree selection removes selected trees from the stand. It affords excellent site protection because it provides for continuous regeneration of the forest. Individual tree selection results in a stand with mixed ages. Cuts would be spaced 20 to 30 years apart.

Mortality salvage (removal of individual dead or dying trees while they still have commercial value) would usually be done in conjunction with a timber sale or sold under a timber sale contract where merchantable quantities of material are present.

Equipment

On non-problem and problem reforestation sites, as determined by TPCC, with slopes less than 35 percent, any acceptable yarding system, site preparation method, and slash disposal method would be permitted.

Where slopes exceed 35 percent or on TPCC Identified problem sites, any acceptable yarding system except ground based (i.e., tractors and rubber tired skidders) would be used. Slash would be disposed of by lopping and scattering, hand piling, burning, or yarding. Site preparation would be done by hand or controlled burns.

Slash Disposal

Slash residue resulting from final harvest cutting would be reduced to a rating of 40 points or less based on the Idaho Forest Practices Act (IFPA) rating system. This would be done to reduce fire hazard and prepare the site for reforestation. Slash resulting from other intensive practices would be reduced to 80 points on the IFPA rating system mainly for fire protection. At least 80 percent of the slash within 50 feet of roads and landings would be piled and burned.

Site Preparation

The primary objectives of site preparation activities would be to reduce competition between future established trees and other vegetation, and to expose mineral soil to encourage the establishment of natural regeneration. The preparation of sites for reforestation would be done on non-stocked areas or areas where harvest has occurred. The equipment restrictions described previously would apply.

Reforestation

All final harvest and reforestation planting projects would be designed to meet stocking standards on at least 90 percent of the treated area within 5 years. Species to be favored would be based on factors such as habitat type, elevation, industry preferences, and ability to obtain quality seedling stock. Species diversity would be encouraged on all areas where possible.

All clearcut areas would be planted with acceptable bare root or containerized stock. Partial or selectively cut areas would rely on natural regeneration when acceptable and desirable seed sources exist; otherwise, they would be planted. Artificial shade would be provided as needed. Planted areas would meet stocking standards on first and third-year survival surveys. Naturally regenerated areas would meet stocking standards on the third-year survival survey. If any areas fail to meet the stocking standards, they would be planted in order to bring them up to standards within two years.

Premmercial Thinning

Premmercial thinning, sanitation thinning, and hand slashing removes unmerchantable surplus trees or brush to provide more light, moisture, and nutrients for the remaining trees. The main objective of these practices is to produce merchantable volume and value sooner than in untreated stands. Premmercial thinning would be done prior to crown closure and any expression of dominance or in the case of ponderosa pine, when the Mean Annual Increment (MAI) begins to decrease. Premmercial thinning would usually be done in stands 10 to 20 years of age.

Individual tree vigor, reforestation criteria, and management objectives would determine the selection of leave trees. Competing trees and vegetation would be eliminated mechanically, by hand, or by prescribed burning. The number of trees left per acre would range from 200 to 450 with spacing based on habitat type, species, and tree size.

Sanitation thinning of stagnated stands over 20 years of age would follow the guidelines for precommercial thinning but would emphasize the leaving of dominant, co-dominant, vigorous, and healthy trees.

Commercial Thinning

Commercial thinning removes merchantable surplus trees to increase light, moisture, and nutrients available for the remaining trees. Stands of commercial size trees which exceed 80 percent stocking would be thinned before crown closure or, in the case of ponderosa pine, when the MAI begins to decrease. This would usually occur in stands 50 to 70 years of age. Selection of leave trees would be based on spacing, health, vigor, and degree of dominance. Spacing would be based on habitat type, species, and tree size.

Fertilization

Fertilizer would be applied at a rate of 150 to 300 pounds of nitrogen per acre. Soil tests would determine if application of phosphorus, potassium, or other trace elements are needed and the rate at which they would be applied. Application would normally be made aerially at 20-year intervals, starting 2 years after precommercial thinning and ending at age 80.

Custodial Management

Lands classified for custodial management would not be managed for timber production and would not be included in allowable cut computations. Timber would be removed when necessary to protect or enhance adjacent forest lands or other resource values. Any timber removal would be done in such a way as to afford maximum protection to the site or to accomplish other resource objectives.

For detailed descriptions of timber management operational components, please refer to the North Idaho Timber Management EIS (BLM 1981).

THREATENED OR ENDANGERED SPECIES

In accordance with policy and law (BLM Manual 6840, Endangered Species Act of 1973), no actions would be taken which would adversely affect the continued existence of any federally-listed threatened or endangered animal or plant species. The BLM also complies with Idaho laws pertaining to state-listed species including "sensitive" species. A threatened/endangered species clearance would be part of the site-specific environmental assessment (EA) prepared for any activity. If any threatened/endangered species (listed or proposed) or critical habitats are located that would be affected, formal consultation with the U.S. Fish and Wildlife Service would be initiated by BLM as prescribed by Section 7 of the Endangered Species Act.

CULTURAL RESOURCES

Special surveys and clearances are required to protect cultural resources. A Class III (complete survey) cultural resources inventory is required of all areas to be subjected to ground manipulation activities. The results of this inventory are used to generate a cultural clearance. In addition to the clearance procedure, the cultural review provides cultural resource input for consideration in a site-specific EA.

Bureau projects possibly affecting areas of historical value will be preceded by a search through the cultural and historical site listings currently on file with the State Historic Preservation Officer. The latest edition of the National Register of Historic Places and monthly supplements will be consulted prior to undertaking any proposed actions. The BLM will consult with the Idaho State Historic Preservation Office concerning the eligibility of any site located and the possible effects on it from any proposed actions. In cases where there may be an effect from proposed activities, BLM will comply with Section 106 of the National Historic Preservation Act (BLM policy, National Historic Preservation Act, NEPA, Executive Order 11593, 36 CFR Part 800).

If any archaeological resources are encountered during ground disturbing activities, operations will cease at the discovery site and a professional archaeologist will be consulted to determine the significance of the material. Depending on this determination, activities would be resumed, modified, or curtailed.

WILDLIFE PROTECTION

1. Big game (deer, elk) habitat would be protected by adhering to the following road closure guideline:

- Critical and important winter range would be closed to vehicles from December 1 to March 30 each year. Roads would be closed through the use of vehicle barriers or gates.

2. The guidelines of the Elk Habitat Coordinating Requirements will be followed for all actions. See Appendix 2-3 of the North Idaho Timber EIS (BLM 1981) for a summary of the requirements.

3. The district snag management guidelines would be followed in timber management areas. Key points are:

- Snag management will be practiced on at least 60 percent of any timber harvest area.
- Maintain a minimum of two large DBH (14" or greater) snags per acre.
- Where snag densities are below the desired level, non-merchantable and/or diseased trees will be girdled to provide snags.
- In firewood cutting areas, "leave" snags would be marked.

4. Cutting units where more than 60 percent of the cover is to be removed would be shaped so that adequate hiding cover is available within 330 feet from any point within the cutting unit. The area must be bordered by cover of not less than 1.5 sight distance. A sight distance is the distance at which a deer or elk is hidden from view within any cover type.

5. All dead-end roads and roads with an expected duration of BLM management use of 5 years or less would be closed. New roads remaining open following harvest would be buffered by vegetation to 1.5 sight distance.

6. The district buffer guidelines discussed below would be followed to maintain stream thermal cover and wildlife travel lanes adjacent to waterways.

BUFFERS

The district buffer guidelines would be followed to provide stream and streamside vegetation buffers to protect water quality, aquatic habitat, and wildlife habitat in the district. The guidelines have been developed from various sources based on protection needs and effects by particular actions. The proposed revisions of the Idaho Forest Practices Rules developed by the State 208 Non-Point Source Pollution Control Program (IDHW 1979) are considered as the minimal guidelines. Specific widths must be established on a case-by-case basis. If special situations are encountered, the guidelines can be modified following an environmental assessment.

The buffer widths are the distances along the ground and are measured from the high waterline of the stream channels. The stream classes are based on the value of the stream uses. Class I streams include potable water supplies and important fish spawning, rearing, and migration streams. Selected Class II streams include streams with important local fisheries or those with high potential and/or existing important wildlife habitat areas. Class II streams are usually head-water streams or minor drainages with little fisheries value.

Within the buffer strips, management activities would minimize wildlife and stream habitat disturbance and protect the soil and vegetative cover to reduce introduction of sediment into the streams. In Class I and Selected Class II streams, no disturbance would be permitted in the thermal buffer except to benefit wildlife or improve the stream habitat conditions. In Class II and sediment buffer areas, timber harvest would be allowed but stream shade must be provided. Soil disturbance and removal of undergrowth vegetation would be kept to a minimum within the buffer zones. The classification of individual streams is delineated on maps in the district office.

Yarding within buffer zones would be kept to a minimum and yarding through stream channels would be avoided. Full suspension cable corridors in or through the buffer zone could be approved on a case-by-case basis. Felling of trees would be outward from the stream and buffer area. No slash or downed timber would be left in the zone between the channel highwater marks. Table A-2 shows the basic buffer guidelines indicating buffer location, width, and type.

TABLE A-2
BUFFER GUIDELINES

<u>Location</u>	<u>Width</u>	<u>Type</u>
Lakes	500 ft. (min.)	Wildlife and scenic improvement
Major rivers	500 ft. (min.)	Wildlife and scenic improvement
Class I Streams-		
a. Thermal zone	Tallest tree height or 75 ft. (min.)	Wildlife, thermal and scenic improvement
b. Sediment zone outside thermal zone	$4 \times \text{slope } (\%) + 50$ ft. or tallest tree height + 25% (min.)	Soil protection
Selected Class II Streams-		
a. Thermal zone	Tallest tree height or 50 ft (min.)	Wildlife thermal cover
b. Sediment zone- outside thermal zone	$2 \times \text{slope } (\%) + 25$ ft.	Soil protection
Class II Streams-		
General protection	75 ft. (37 1/2 ft. each side of stream)	Wildlife and thermal cover

VISUAL (SCENIC) RESOURCE VALUES

A visual resource contrast rating would be conducted for all proposed activities. Projects which would reduce scenic quality below established Visual Resource Management (VRM) guidelines would be modified, relocated, or abandoned, if necessary (BLM Manual 8430).

RECREATION OPPORTUNITY SETTINGS AND CLASSES

All acreage in the WSAs has been categorized into various recreation settings through the recreation inventory. Areas where recreation needs have been identified require explicit recreation management. These needs are based upon indicators such as use conflicts or resource degradation.

In those areas where there is a need to manage for recreation, such as in the Snowhole Rapids WSA, various "recreation opportunity classes" are established under the alternatives. Management activities which would alter an established opportunity class would be modified, relocated, or abandoned to meet identified demands for specific recreation opportunities.

For those areas where no recreation needs are identified, BLM does not specifically manage for recreation, but provides only a setting for recreation to take place.

WATER QUALITY

Water quality on BLM administered lands would be maintained equal to or above any federal or State of Idaho legal water quality criteria (BLM Manual 7240; The Federal Water Pollution Control Act Amendments of 1972; The Clean Water Act of 1977; The Safe Drinking Water Act, 1974). Water quality protection is provided under the management practices in accordance with the cooperative agreements with the Idaho Departments of Health and Welfare (Forest Practices), September 26, 1979, and Water Resources (Stream Protection), January 16, 1979.

FLOODPLAINS

No actions would be permitted which would cause definable adverse impacts to the natural and beneficial functions of floodplains (BLM Manual 7221; Floodplain Management Guidelines for Implementing Executive Order 11988, Federal Register, Volume 43, No. 29, February 10, 1978).

WETLAND-RIPARIAN AREA PROTECTION

Management activities would not occur where they could destroy or degrade wetland-riparian areas (BLM Final Guidelines to Implement Executive Order 11990, Federal Register, Volume 45, No. 25, February 5, 1980, and BLM Manual 6740).

BURNING

All burning would be done to meet specific goals and objectives. Constraints would be prescribed to assure maximum protection of site quality. All burning would be planned in conjunction with the local Forest Protection Districts. All prescribed (in-place) burning would be planned according to guidelines in BLM Draft Manual 9215. Prior to burning, weather conditions would be checked; the Division of Environment, Idaho Department of Health and Welfare, would be informed of the planned burn; and a burning permit would be obtained from the local Forest Protection District.

FIRE PROTECTION

Fire protection activities in the district are currently under contract with both the Idaho Department of Lands and the Forest Service. Current fire planning provides adequate resource protection for most areas of the district. In those areas where a special designation is recommended (wilderness, ONA, RNA), fire plans would be amended to protect the values for which the areas were designated.

GLOSSARY

GLOSSARY

Administratively Endorsed Areas: Areas recommended for wilderness designation through the U.S. Forest Service RARE II process.

Aesthetics: Dealing with the nature of the beautiful and with judgements concerning beauty.

Air Quality Classes: Classes established by the Environmental Protection Agency that define the amount of pollution considered significant within an area. Class I applies to areas where almost any change in air quality would be considered significant; Class II applies to areas where the deterioration normally accompanying moderate well-controlled growth would be considered insignificant; and Class III applies to areas where deterioration up to the national standards would be considered insignificant.

Air Quality Standard: An established concentration, exposure time, or frequency of occurrence of a contaminant or multiple contaminants in the ambient air which shall not be exceeded.

Allotment: An area of land where one or more individuals graze their livestock. It generally consists of public land but may include parcels of private or state owned lands. An allotment may consist of several pastures.

Allotment Management Plan (AMP): A documented program which applies to livestock operators on the public lands, which is prepared in consultation with the lessee(s) involved and conducted in order to meet the multiple-use, sustained-yield, economic, and other needs and objectives as determined for the public lands through land use planning.

Allowable Cut: The amount of forest products that may be harvested annually or periodically from a specified area over a stated period in accordance with the objectives of management.

Anadromous Fish: Fish which migrate from the sea to breed in fresh water. Their offspring return to the sea.

Animal Unit Month (AUM): The amount of forage required to sustain one cow (1,000 lbs.) with one calf under 6 months of age or their equivalent for one month. For this EIS an AUM represents 800 pounds (air dried) of palatable forage.

Annual Cut: Amount of timber, usually measured in board feet, harvested annually.

Aquatic Vegetation: Plants which grow in water.

Archaeological Resources: The physical evidence of past human occupation which can be used to reconstruct the culture of past peoples. The archaeological record is usually expressed in the form of districts, sites, structures, and objects.

Area of Critical Environmental Concern (ACEC): An area within the public lands where special management attention is required (when such areas are developed or used, or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

Artifact: Any object made, modified, or used by man, usually movable.

Aspect: The direction a slope faces.

Board Foot: A unit of solid wood, 1 foot square and 1 inch thick.

Buffer Strip: A protected area that separates the timber cutting unit from the object or thing to be preserved.

Bureau Planning System: A process used in the BLM to establish land use allocations, constraints, and objectives for various categories of public land use.

Cable Yarding: Using a steel cable to transport logs from where they are cut to a stationary machine on the landing. Yarding can be done in uphill or downhill directions with the logs being dragged or lifted partially or completely above the ground.

Canopy: The more or less continuous cover of branches and foliage formed collectively by the crowns of adjacent trees and other woody growth.

Canopy Cover: The aerial foliage in a vegetation layer shading vegetation in lower layers.

Cavity Dwellers: Birds and animals that live in holes or openings in trees, snags, or cliffs.

Cherrystem: A dead-end road that protrudes into a WSA. The WSA boundary is formed around this road.

Clearcutting: A method of timber harvesting in which all trees, merchantable or unmerchantable, are cut from an area at one time.

Climax: When plants of the existing vegetative community are the only ones which can perpetuate themselves given indefinite time without disturbance.

Commercial Thinning: Removal of merchantable surplus trees.

Commodity Emphasis: Would emphasize the management, production, and use of resources such as minerals, timber, and domestic livestock ALMs.

Community Type: Groups of plants (usually grasses/forbs and shrubs) which grow together in recognizable associations.

Contrast Rating: A method for determining the extent of visual impact for an existing or proposed activity that will modify any landscape feature.

Control of Competing Vegetation: This practice is done to increase light, water, and nutrients available to desirable coniferous trees by damaging or killing other vegetation. This practice can be accomplished using chemical herbicides or hand slashing (cutting).

Critical Habitat: That habitat considered by the Secretary of the Interior to be necessary to the normal needs or survival and recovery of listed Threatened or Endangered Species. It may also include habitat not currently occupied into which a listed species could expand.

Cultural Resources: Those fragile and nonrenewable remains of human activity, occupation, or endeavor, reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features, that were of importance in human events. These resources consist of 1) physical remains, 2) areas where significant human events occurred—even though evidence of the event no longer remains, and 3) the environment immedi-

ately surrounding the actual resource. Cultural resources, including both prehistoric and historic remains, represent a part of the continuum of events from the earliest evidences of man to the present day.

Custodial Management: Lands in this class would not be managed for timber production and are not included in allowable cut computations. These lands are usually managed for other resource values, i.e., wildlife, range, recreation, etc. Timber would be removed when necessary to protect or enhance adjacent forest or other resource values.

Distance Zone: The area that can be seen as foreground, middleground, background, or seldom seen.

Ecosystem: An ecological unit consisting of both living and nonliving components which interact to produce a natural, stable system.

Endangered Species: Those species officially designated by the Fish and Wildlife Service through publication in the Federal Register as being in danger of extinction throughout a significant portion of their range. The Endangered Species Act of 1973 requires that critical habitat for endangered species be delineated and enjoins Federal agencies from taking actions within such designated critical habitat that would have a significant adverse impact on the endangered species.

Environmental Assessment (EA): A systematic environmental analysis of site-specific BLM activities. Used to determine whether such activities have a significant effect on the quality of the human environment and whether a formal environmental statement is required.

Erosion (Soil): Removal of soil from its place of origin to a point of deposition other than a stream channel.

Even-Aged Stand: All trees are the "same" age or at least of the same age class.

Falling/Felling: Cutting down trees.

Flow: The volume of water passing a given point in a specified period of time.

Forage: All browse and herbaceous foods that are available to grazing animals.

Forest Land: Land that is now, or is capable of becoming, at least 16.7 percent stocked with forest trees and that has not been developed for nontimber use.

Full Suspension Logging: Transporting logs from where they are cut to the landing with both ends lifted above the ground.

Ground Based Yarding: The process of dragging logs behind a moving machine or animal from where they are felled to the landing. Ground based yarding is normally done in a downhill direction.

Habitat: The environment in which an organism occurs.

Habitat Type: An area of land potentially capable of producing similar plant communities at climax.

Hiding Cover (Elk): Includes coniferous vegetation, and in specific instances, can include deciduous vegetation capable of hiding 90 percent of an elk from a human's view at a distance equal to or less than 200 feet (61 m).

Historical Resources: All evidences of human activity that date from historic, i.e., recorded history periods. Historic resources are cultural resources and may be considered archaeological resources when archaeological work is involved in their identification and interpretation.

Individual Tree Selection: A form of partial cutting that removes selected individual trees from the stand.

Intensive-Extensive Timber Management Lands: Lands in this class would be managed using practices such as thinnings, site preparation, planting, fertilization, etc., to maximize timber production on a sustained yield basis. Generally, these lands are TPCC rated Non-Problem or Restricted Productive which would respond to thinning, fertilization, and planting.

Landing: Any place on or adjacent to the logging site where logs are assembled for further transport.

Lop and Scatter: Cutting branches, tops, and small trees after felling so that the resultant slash will lie close to the ground; to cut limbs from felled trees.

Lower Gradient Stream: Streams in which the slope of the channel approaches zero.

Management Framework Plan (MFP): Land use plan for public lands which provides a set of goals, objectives, and constraints for a specific planning area to guide the development of detailed plans for the management of each resource.

Mean Annual Increment: The total growth of the tree divided by the total age.

Mortality/Salvage Cutting: Removal of individual trees killed or injured by fire, insects, disease, etc., and the removal of those trees likely to die prior to final harvest cut so as to utilize merchantable material.

Multiple Use: Management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people.

National Register of Historic Places (National Register): Established by the Historic Preservation Act of 1966. A listing maintained by the National Park Service of architectural, historical, archaeological, and cultural sites of local, state, or national significance. Sites are nominated to the Register by the states and by Federal agencies. Copies of the National Register are available from the Superintendent of Documents, USGPO, Washington, D.C. 20402.

Naturalness: Refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (From section 2(c), Wilderness Act).

Non-attainment Area: A designated area that does not meet ambient air quality standards.

Non-forest Land: Land that has been developed for non-timber uses or land that is incapable of being 16.7 percent stocked with forest trees.

Non-problem Sites: Productive forest sites characterized by stable soils and bedrock. They can be logged by normal ground based and cable practices, and reforestation can be established within 5 years after final harvest using normal techniques.

Non-productive Forest Land: Land which is not capable of yielding at least 20 cubic feet of wood per acre per year from commercial species, or land which is capable of producing only non-commercial tree species.

Off-Road Vehicle (ORV): Any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, i.e., marsh, swamp land, or other terrain.

Old-growth Dependent: An animal species so adapted that it can exist only in old-growth forests.

Overstory: The uppermost vegetative "layer" of a forest (usually trees).

Partial Cutting or Selective Cutting: Tree removal other than by clearcutting.

Particulates: Finely divided solid or liquid particles in the air or in an emission; includes dust, smoke fumes, mist, spray, and fog.

Plant Community: An association of plants of various species found growing together in areas with similar site characteristics.

Precommercial Thinning: Removal of surplus trees in a stand prior to their reaching merchantable size.

Prehistoric Resources: All evidences of human activity that pre-date recorded history and can be used to reconstruct lifeways and cultural history of past peoples. These include sites; artifacts; environmental data; and all other relevant information and the contexts in which they occur.

Prescribed Burning: Skillful application of fire to natural fuels under conditions of weather; fuel moisture; soil moisture; and other conditions that will produce the intensity of heat and rate of spread required to accomplish certain planned benefits to one or more objectives of silviculture, wildlife management, grazing, and hazard reduction.

Primitive Recreation Opportunity: Opportunity for isolation from the sights and sounds of man. Opportunity to feel a part of the natural environment; to have a high degree of challenge and risk; and to use outdoor skills.

Productive Forest Land: Forest land that is now producing or is capable of producing at least 20 cubic feet per acre per year of commercial coniferous tree species.

Productive Forest Land Excluded From the Base: Productive forest lands where the use of special logging practices or reforestation techniques would still result in degradation of the site or failure of the area to reforest within 5 years after harvest. These lands are not included in the allowable cut base.

Public Land: Historically, the public domain administered by the Bureau of Land Management for the purpose of providing forage, wood products, and minerals for public users. The uses and resources of these public lands have been expanded in recent years to provide open space, recreation resources, protection of cultural resources, and other commodities.

Range Condition: The current productivity of a range relative to what that range is naturally capable of producing.

RARE II: The roadless area review and evaluation used by the U. S. Forest Service to determine wilderness suitability of National Forest lands.

Recreation Opportunities: The opportunity to participate in an intrinsically, or self-rewarding experience that finds its source in voluntary engagements (mental and/or physical) during nonobligated time.

Reforestation: Reestablishment of a tree crop on forest land.

Regeneration: The renewal of a tree crop whether by natural or artificial means; also, the young crop itself.

Restricted Use Sites: Productive forest sites that need special logging practices or reforestation techniques to preserve soil productivity or reforest the site within 5 years after final harvest.

Riparian: Areas adjacent to streams and other bodies of water; wet meadows; springs; wells; and other sources.

Riparian Vegetation: Plants growing in close proximity to a watercourse, lake, or wet areas, and often the plants depend on their roots reaching the water table.

Roaded Natural Recreation Opportunity: About equal opportunities for affiliation with user groups and opportunities for isolation from sights and sounds of man. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities are not very important. Practice and testing of outdoor skills may be important. Opportunities for both motorized and non-motorized forms of recreation are possible.

Sanitation Thinning: Removal of surplus trees from a stand. The trees may be of merchantable or unmerchantable size. A commercial thinning would not necessarily follow.

Scarification: Disturbance of the upper soil layer by mechanical means in preparing a site for seeding or planting.

Scenic Quality: The degree of harmony, contrast, and variety within the landscape.

Sediment Yield: Eroded soil reaching a water system.

Semi-Primitive Motorized Recreation Opportunity: Some opportunity for isolation from the sights and sounds of man, but not as important as for primitive opportunities. Opportunity to have a high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills. Explicit opportunity to use motorized equipment while in the area.

Semi-Primitive Nonmotorized Recreation Opportunity: Some opportunity for isolation from the sights and sounds of man, but not as important as for primitive opportunities. Opportunity to have a high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills.

Semi-Urban Recreation Opportunity: Opportunities are prevalent to experience affiliation with individuals and groups at sites with convenience facilities. These factors are generally more important than the physical environment.

Sensitive Animals: Animals classified by the BLM and Idaho Fish and Game Department are those:

—not yet officially listed but which are undergoing a status review or are proposed for listing according to Federal Register notices published by the Secretary of the Interior or

the Secretary of Commerce, or according to comparable State documents published by State officials;

—whose populations are consistently small and widely dispersed, or whose ranges are restricted to a few localities, such that any appreciable reduction in numbers, habitat availability, or habitat condition might lead toward extinction; and

—whose numbers are declining so rapidly that official listing may become necessary as a conservation measure. Declines may be the cause of one or more of several factors including destruction, modification, or curtailment of the species' habitat or range; overutilization for commercial, sporting, scientific, or educational purposes; disease or predation; the inadequacy of existing regulatory mechanisms; and/or other natural or manmade factors adversely affecting the species' continued existence.

Seral Stages: Communities of plants that occupy an area as succession progresses toward climax.

Series: A group of habitat types with the same climax tree species.

Shelterwood Cutting: A series of two partial cuttings designed to establish a new crop of trees under the protection of the old.

Sight Distance (Elk): The distance at which an elk is hidden from view within any cover type. This varies according to the size and spacing of coniferous trees. Deciduous vegetation can be considered in sight distance measurements only when in dormant condition (without leaves).

Silviculture: The art of producing and tending a forest; application of the knowledge of the life history and general characteristic of forest trees and stands for controlling the establishment, composition, and growth of a forest.

Site Preparation: This practice is done to reduce competition between newly established trees and other vegetation, and to expose mineral soil to encourage the establishment of natural regeneration.

Skidding: A loose term for hauling logs by sliding from stump to roadside.

Skid Trail or Road: Any way, more or less prepared, over which logs are dragged.

Slash: The residue left on the ground after felling timber.

Snag: A standing dead tree from which the leaves and most of the branches have fallen.

Snag Dependent Animals: Animals that depend on dead trees for all or part of their life cycles.

Solitude: The state of being alone, isolated, or remote from habitations.

State Historic Preservation Officer (SHPO): The official within each State, authorized by the State at the request of the Secretary of the Interior, to act as a liaison for purposes of implementing the National Historic Preservation Act of 1966.

Substantially Unnoticeable: Refers to something that either is so insignificant as to be only a very minor feature of the overall area or is not distinctly recognizable by the average visitor as being manmade or man-caused because of age, weathering or biological change.

Succession: The orderly process of community change. Process by which one plant community will succeed another over time given the same climatic conditions.

Suitability: As used in the Wilderness Act and in the Federal Land Policy and Management Act, refers to a recommendation by the Secretary of the Interior or the Secretary of Agriculture that certain Federal lands satisfy the definition of wilderness in the Wilderness Act and have been found appropriate for designation as wilderness on the basis of an analysis of the existing and potential uses of the land.

Sustained Yield: The yield that a forest can produce continuously at a given intensity of management.

Thermal Cover: Defined as a stand of coniferous trees which is 40 feet or more in height, has at least 70 percent average crown cover, and which moderates extremes of ambient temperature. (Pederson, personal communication as cited in Black et al. 1976; and Keay, J. A., 1977).

Threatened Species: Those species which are likely to become endangered in the foreseeable future throughout all or a significant portion of their range. Critical habitat can also be designated for threatened species (see endangered species).

Threshold: A point (value) on a continuum that when exceeded causes a significant impact.

Timber Production Capability Classification (TPCC): A classification system that identifies the commercial forest base which is capable of producing timber on a sustained yield basis.

Timber Stand: A group of trees occupying an area and sufficiently uniform in composition (species), age, size, and condition to be recognized from other groups of vegetation.

Understory Species: Shade-tolerant plant species which characteristically grow beneath the forest canopy.

Unit Resource Analysis (URA): A BLM planning document which contains a comprehensive inventory and analysis of the physical resources and an analysis of their potential for development within a specified geographic area.

Urban Recreation Opportunity: Opportunity to experience affiliation with individuals and groups is prevalent as is the convenience of sites and opportunities. Experiencing natural environments, having challenges and risks afforded by the natural environment, and the use of outdoor skills are relatively unimportant.

Visual Contrast: The effect of a striking difference in the form, line, color, or texture of an area being viewed.

Visual Resource: The land, water, vegetation, animals, and other features that are visible on all public lands.

Visual Resource Management Class: The degree of alteration that is acceptable within the characteristic landscape. It is based upon the physical and sociological characteristics of any given homogenous area.

Visual Sensitivity: The degree of concern expressed by the user toward the scenic quality and existing or proposed visual change in a particular characteristic landscape.

Water Yield: Precipitation minus losses for evaporation and transpiration. Usually expressed in equivalent inches or acre feet.

Wild and Scenic River: Any free-flowing stream designated and authorized for inclusion in the National Wild and Scenic Rivers System as provided by the Wild and Scenic Rivers Act of October 1968 (P.L. 90-542).

Wilderness Area: An area formally designated by Act of Congress as part of the National Wilderness Preservation System.

Wilderness Study Area: An area of Public Land which has undergone BLM's initial and intensive wilderness inventories, including public involvement, and has been determined to have wilderness characteristics as defined in Sec. 2(c) of the Wilderness Act of 1964.

Yarding: The initial haul to a loading point, i.e., transporting timber from the stump to a landing.

REFERENCES

REFERENCES

- Ayensu, E. S., and DeFillips, R.A. 1975. Endemic and Threatened Plants of the United States. Smithsonian Institute and World Wildlife Fund, Inc.
- _____. 1978. (Revised List). Endemic and Threatened Plants of the United States. Smithsonian Institute and World Wildlife Fund, Inc.
- BLM. 1981. North Idaho Timber Management Environmental Impact Statement (Draft and Final). U. S. Department of the Interior, Bureau of Land Management.
- _____. 1981. Northern Idaho Grazing Management Environmental Impact Statement (Draft and Final). U. S. Department of the Interior, Bureau of Land Management
- Bergsvik, Karl. 1968. Policies and Procedures for Planning Allowable Cuts for Even-Aged Forest Management. (Unpublished paper). U. S. Department of the Interior, Bureau of Land Management, Oregon State Office, Portland, Oregon.
- Brown, George W. and Krygler, J. T. 1980. Forestry and Water Quality. Corvallis, Oregon: Oregon State University Book Stores, Inc. 124 p.
- Burroughs, E. R. Jr. et al. 1976. Slope Stability in Road Construction. U. S. Department of Interior, Bureau of Land Management, Oregon State Office, Portland, Oregon.
- Burt, W.H., and Grossenherder, R.P. 1964. A Field Guide to the Mammals. Boston: Houghton Mifflin Co. 284 p.
- Call, Mayo. 1979. Habitat Management Guides for Birds of Prey. Technical Note 338. U. S. Department of Interior, Bureau of Land Management.
- Castelin, Paul M. 1976. A Reconnaissance of the Water Resources of the Clearwater Plateau, Nez Perce, Lewis, and Northern Idaho Counties, Idaho. Water Information Bulletin No. 41. May 1976. Idaho Department of Water Resources. 46 p.
- Cline, R. G. et al. 1977. Potential Water Yield Response Following Clearcut Harvesting on North and South Slopes in Northern Idaho. Res. Paper INT-191. June 1977. U. S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, Ogden, Utah. 16 p.
- Daubenmire, J., and Daubenmire, R. 1968. "Forest Vegetation of Eastern Washington and Northern Idaho." Technical Bulletin 60. Washington State University Agricultural Experiment Station, Pullman, Washington. 104 p.
- Davis, R. J. 1952. Flora of Idaho. Dubuque, Iowa: Wm. C. Brown Co.
- DOE. 1981. Energy Resources Evaluation of Wilderness Study Areas. (Unpublished). Department of Energy.
- EPA. 1975b. Logging Roads and Protection of Water Quality. EPA 910/9-75-007. March 1975. Prepared in part by Arnold & Arnold and Dames & Moore, Seattle, Washington. Contract No. 68-01-2277. Prepared by and for the U. S. Environmental Protection Agency, Region X, Seattle, Washington. 312 p.

Erman, Don C. et al. 1977. Evaluation of Streamside Bufferstrips for Protecting Aquatic Organisms. Contribution No. 165. California Water Resources Center, University of California, Davis, California.

Froehlich, H. A. 1978. The Effects of Soil Compaction by Logging on Forest Productivity. December 1978. Prepared by Forest Engineering Department, Oregon State University, Corvallis, Oregon. Contract No. 53500-CT4-5(N). Prepared for U.S. Department of the Interior, Bureau of Land Management, Portland, Oregon.

Garton, Edward O. et al. 1979. Terrestrial Wildlife Habitat Inventory of BLM Lands in West-Central Idaho. Final Report. University of Idaho, Moscow.

Garton, Edward O., and Keay, Jeffrey A. 1978. Terrestrial Wildlife Habitat Inventory of the Rochat Study Area, BLM, Northern Idaho. Final Report. University of Idaho, Moscow.

Harper, J. A. 1969. Relationship of Elk to Reforestation in the Pacific Northwest, Edited by H. C. Black. School of Forestry, Oregon State University, Corvallis. pp. 67-71.

Haupt, Harold F., and Kidd, W. J. 1965. "Good Logging Practices Reduce Sedimentation in Central Idaho." Journal of Forestry. Volume 63, Number 9. September 1965. pp. 664-670.

Heidel, Bonnie. 1979. "Endangered and Threatened Plants in the Northern Idaho BLM District." (Unpublished manuscript). U. S. Department of the Interior, Bureau of Land Management, Coeur d'Alene, Idaho. 100 p.

Hitchcock, C. L. et al. 1969. Vascular Plants of the Pacific Northwest. Seattle: University of Washington Press.

IDE. 1981. Annual Wages In Idaho-1980. (Unpublished). Idaho Department of Employment.

_____. 1981. Average Monthly Employment in Idaho-Calender 1980. (Unpublished). Idaho Department of Employment.

IDHW. 1979. State of Idaho Forest Practices Water Quality Management Plan. July 1979. Idaho Department of Health and Welfare, Division of Environment, Statehouse, Boise, Idaho.

_____. 1978. Idaho Water Quality Status 1978. December 1978. Volume I. Prepared by the Idaho Department of Health and Welfare, Division of Environment, Bureau of Water Quality, Boise, Idaho. 174 p.

_____. 1980. Idaho Air Quality Implementation Plan. January 1980. Idaho Department of Health and Welfare, Division of Environment, Boise, Idaho.

Lull, Howard W. 1959. Soil Compaction on Forest and Range Lands. Miscellaneous Paper 768. U. S. Department of Agriculture, Forest Service, Washington, D. C.

Martin, R. E. et al. 1979. Effects of Fire on Fuels, A State-of-Knowledge Review. U. S. Department of Agriculture, Forest Service. Gen. Tech. Report WO-13. September 1979. Prepared for the Forest Service National Fire Effects Workshop, Denver, Colorado, April 10-14, 1978. 28 p.

Megahan, W. F., and Kidd, W. J. 1972. "Effects of Logging and Logging Roads on Erosion and Sediment Deposition from Steep Terrain." Journal of Forestry. Volume 70, Number 3. pp. 136-141.

- Megahan, W. F., and Molitor, D. C. 1975. "Erosional Effects on Wildlife and Logging in Idaho." Proceedings of Watershed Management Symposium. American Society of Civil Engineers: Logan, Utah. August 11-13, 1975. pp. 423-444.
- Metsker, Howard E., and Murphy, Leon W. 1962. Inventory of Idaho Streams Containing Anadromous Fish Including Recommendations for Improving Production of Salmon and Steelhead. Part II Clearwater River Drainage. Idaho Department of Fish and Game.
- PNRBC. 1970. Columbia-North Pacific Region Comprehensive Framework Study of Water and Related Lands. Appendix V (Water Resources). April 1970. Pacific Northwest River Basins Commission, Vancouver, Washington. 1022 p.
- Packer, P. E., and Haupt, H. F. 1965. "The Influence of Roads on Water Quality Characteristics." Proceedings of the Society of American Foresters, Detroit, Michigan. pp. 112-115.
- Pfister, Robert D. 1976. "Land Capability Assessment by Habitat Types." America's Renewable Resource Potential. 1975. Proceedings at the 1975 National Convention of the Society of American Foresters. Washington, D.C. 503 p.
- Ringe, R. R. et al. 1978. Survey of Streams in the Emerald Empire and Cottonwood Resource Areas of Idaho. Interagency Agreement No. YA-515-IA7-15. Prepared for the Bureau of Land Management, Boise, Idaho. 159 p.
- Rosa, J. Marvin. 1968. Water Yield Maps for Idaho. ARS 41-141. March 1968. U. S. Department of Agriculture, Agricultural Research Service, Soil and Water Conservation Research Division, Northwest Branch, Moscow, Idaho. 15 p. and 20 maps.
- Stage, Albert R. 1973. Propognosis Model for Stand Development. U. S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, Ogden, Utah.
- Welsh, Thomas L. et al. 1965. Inventory of Idaho Streams Containing Anadromous Fish Including Recommendations for Improving Production of Salmon and Steelhead. Part I Snake, Salmon, Weiser, Payett, and Boise River Drainages. Idaho Department of Fish and Game.
- Wildesen, Leslie E. 1978a. "Conserving Archaeological Values: An Approach to Impact Assessment in Archaeological Resource Management." Paper presented at the Oregon Academy of Sciences Annual Meeting: McMinnville, Oregon. February 25, 1978.
- _____. 1978b. "Conserving Archaeological Values: An Approach to Impact Assessment in Archaeological Resource Management (Preliminary Draft)." U. S. Department of Agriculture, Forest Service, Region VI, Portland, Oregon.
- Wilson, Lanny O. 1975. Distribution, Season of Use, and Habitat of the Mammals, Birds, Amphibians and Fishes of Idaho. U. S. Department of Interior, Bureau of Land Management, Idaho State Office, Boise, ID.

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